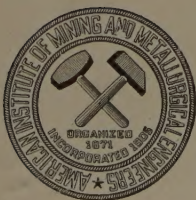


List of Members  
*of the*  
American Institute  
*of*  
Mining and Metallurgical  
Engineers

1929-1930

Corrected to December 5, 1929



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List of Members

1891

Annual Meeting

Mining and Metallurgical

Engineers

1891

Annual Meeting

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## Honorary Members

YEAR OF ELECTION		
1913.	FRANK DAWSON ADAMS.....	Montreal, Canada.
1921.	WILLIAM CUTHBERT BLACKETT.....	Sacriston, Durham, England.
1923.	GELASIO CAETANI .....	Rome, Italy.
1929.	TAKUMA DAN .....	Tokyo, Japan.
1920.	HENRY STURGIS DRINKER .....	Merion Station, Pa.
1922.	FEDERICO GIOLITTI.....	Torino, Italy.
1906.	SIR ROBERT A. HADFIELD.....	London, England.
1928.	JOHN HAYS HAMMOND .....	New York, N. Y.
1928.	WILLIAM BOYCE THOMPSON .....	Yonkers, N. Y.
1921.	FRANK WILLIAM HARBORD .....	London, England.
1917.	HERBERT HOOVER .....	Washington, D. C.
1905.	HENRI LECHATelier .....	Paris, France.
1921.	C. McDERMID .....	London, England.
1913.	EZEQUIEL ORDONEZ .....	Mexico City, Mexico.
1909.	ALEXANDRE POURCEL .....	Paris, France.
1911.	ROBERT H. RICHARDS.....	Cambridge, Mass.

## HONORARY MEMBERS (*Deceased*)

YEAR OF ELECTION	YEAR OF DECEASE	YEAR OF ELECTION	YEAR OF DECEASE
1876.	RICHARD AKERMAN .....	1890.	ADOLPH PATERA .....
1909.	RICHARD BECK .....	1886.	JOHN PERCY.....
1872.	SIR LOTHIAN BELL.....	1888.	FRANZ POSEPNY .....
1905.	ANDREW CARNEGIE .....	1911.	ROSSITER W. RAYMOND...1918
1892.	A. DEL CASTILLO .....	1884.	THEODOR RICHTER .....
1902.	MANUEL MARIA CONTRERAS.1902	1899.	W. C. ROBERTS-AUSTEN..1902
1888.	A. DAUBRÉE .....	1890.	ALBERT SERLO.....
1888.	HATON DE LA GOUPILLIERE.1927	1880.	C. WILLIAM SIEMENS...1883
1906.	JAMES DOUGLAS .....	1906.	JOHN E. STEAD.....
1884.	THOMAS M. DROWN ....	1909.	JAMES M. SWANK.....
1890.	MORITZ GAETZSCHMANN ..1895	1872.	DAVID THOMAS .....
1873.	L. GRUNER .....	1902.	DIMITRY CONSTANTIN
1888.	HANS HOEFER .....		TSCHERNOFF .....
1921.	HEINRICH O. HOFMAN...1924	1873.	PETER R. VON TUNNER..1897
1919.	ROBERT W. HUNT.....	1885.	HERMANN WEDDING.....
1915.	JAMES FURMAN KEMP...1926	1910.	TSUNASHIRO WADA .....
1891.	BRUNO KERL .....	1907.	CHARLES D. WALCOTT...1927
1895.	JOSEPH LE CONTE.....	1891.	DR. ING. H. C. EMIL
1891.	J. P. LESLEY.....		SCHROEDTER .....
1899.	FLORIS OSMOND .....	1921.	FERDINAND FOCH.....



## LIST OF MEMBERS ALPHABETICALLY ARRANGED

## EXPLANATION OF SYMBOLS

\*\* Junior Member. † Associate. ‖ Junior Associate.

Members are not marked.

Capital letters signify Honorary membership.

Student Associate and Rocky Mountain members on pages 165-167.

Abadilla, Quirico A.	Catanawan, Tayabas, P. I.	'20
Abbey, Robert Graham, District Mgr., The W. W. Sly Mfg. Co., 50 Church St., New York, N. Y.		'21
Abbott, A. N., Mines Supt., Mazapil Copper Co., Ltd.	Concepcion del Oro, Zac., Mexico.	'23
Abbott, Clarence E., Mgr., Mines & Quarries, Tenn. Coal, Iron & R. R. Co., 1242 Brown Marx Bldg., Birmingham, Ala.		'04
Abbott, Louis Benjamin, Chief Engr., Consolidation Coal Co., Elkhorn Div.	Jenkins, Ky.	'15
Abeel, George H., Jr., Cons. Min. Engr.	Box 427, Santa Monica, Cal.	'18
Abel, Albert E., Asst. to Pres., Valley Mould & Iron Corp.	Hubbard, Ohio.	'19
Abel, Raymond L., Asst. Prof., Dept. of Pet. Refin., Univ. of Pittsburgh.	Pittsburgh, Pa.	'28
Abernathy, George Elmer, Prof. of Geol. & Min., Kansas State Teachers College, Pittsburg, Kans.		'20
‖Abernethy, D. Carl, Jr. Min. Engr., Hudson Coal Co.	Scranton, Pa.	'27
Abey, Hiroshi, Min. & Met. Engr., Min. & Met. Dept., The Higher Technical School, Osaka, Japan.		'17
†Aborn, Robert H., Instructor in Met., Harvard University.	Cambridge, Mass.	'19
†Abozeid, Mahmood, Pet. Production Engr., Marland Oil Co.	Ponca City, Okla.	'26
Abraham, Arthur W., Geol., Richfield Oil Co.	Box 788, Bakersfield, Cal.	'20
Abraham, W. E. V., Member, Geol. Staff of Burmah Oil Co., Ltd. Nyaungghla, Upper Burma, India.		'23
Abrahams, Alexander I., Gen'l Mgr., Racon Electrical Co.	Slough, Bucks, England.	'13
†Abrahamson, C. W., Min. Engr., The Mond Nickel Co., Ltd.	Coniston, Ont., Canada.	'21
‖Abson, Guy W., Asst. Metallographist, Youngstown Sheet & Tube Co., Research Dept., Youngstown, Ohio.		'28
Abstein, Henry T., Engr. & Mgr., Profile-Tamarack Mines Co.	Yellow Pine, Idaho.	'27
†Acker, E. O'C., Met.	128 East Washington Lane, Germantown, Philadelphia, Pa.	'86
Ackerman, D. E., Met. Research Lab., International Nickel Co., Inc.	Bayonne, N. J.	'24
†Ackerman, Ernest R., Pres., Lawrence Portland Cement Co.	Plainfield, Union Co., N. J.	'15
‖Ackerman, George F., Jr. Min. Engr., El Potosi Min. Co.	Apt. 13, Chihuahua, Chih., Mexico.	'29
**Acres, T. H., Geol. Dept., Valuation & Pet. Engrg., Richfield Oil Co. 555 S. Flower St., Los Angeles, Cal.		'29
Adachi, Jinzoo.	Address Wanted.	'88
Adair, Arthur C., Valuation Engr., Internal Revenue, Treasury Dept.	Washington, D. C.	'18
Adam, John, Min. Engr., The Zinc Corp. Ltd., Box 4 C, Broken Hill, N. S. W., Australia.		'29
Adami, Arthur E., V. P., Montana State School of Mines.	Butte, Mont.	'19
Adami, Charles J., Min. Engr., St. Joseph Lead Co.	4540 Lindel Blvd., St. Louis, Mo.	'12
Adams, C. W.	729 South Normandie St., LaGranada Apt., Los Angeles, Cal.	'14
Adams, Cuyler	Deerwood, Minn.	'05
Adams, F. J., Gen'l Agent, Gulf Production & Pipe Line Cos.	Fort Worth, Tex.	'20
ADAMS, FRANK DAWSON, Logan Prof. of Geology and Dean, Faculty of Applied Science, McGill Univ., Montreal, Que., Canada.		'13
Adams, Gale L., Research Engr., General Pet. Corp. of California, Higgins Bldg., Los Angeles, Cal.		'18
Adams, George I., Prof. of Geol. & Mineralogy.	Univ. of Alabama, Tuscaloosa, Ala.	'01
Adams, H. H., Cons. Geol.	Room 415, W. T. Waggoner Bldg., Fort Worth, Tex.	'20
Adams, Henry, Cons. Min. Engr.	1050 Edgewood Ave., Plainfield, N. J.	'02
Adams, Henry H.	285 Madison Ave., New York, N. Y.	'27
Adams, Henry Farnum, Engr., Charge, Experimental Work, Inspiration Concentrator, Inspiration Cons. Copper Co., Box 354, Inspiration, Ariz.		'25
Adams, Huntington, Min. Engr.	141 Broadway, New York, N. Y.	'03
Adams, Leland D., V. P., Leslie-California Salt Co.	155 Montgomery St., San Francisco, Cal.	'14
Adams, Louis W., Illinois Steel Co.	Gary, Ind.	'15

Adams, R. L., Min. Engr., Old Ben Coal Corp., Mine 12.....	Christopher, Ill.	'19
Adams, Robert M., Robert M. Adams Co.....	1201 Fidelity Bldg., Duluth, Minn.	'20
Adams, Sidney F., Geol., Empire Zinc Co.....	Gilman, Colo.	'20
Addams, Charles E., Min. Engr.....	841 N. 2nd Ave., Phoenix, Ariz.	'14
Addicks, Lawrence, Cons. Engr.....	Bel Air, Md.	'02
Adkerson, J. Carson, Pres., American Manganese Producers' Assn. Room 709-710, Metropolitan Bank Bldg., Washington, D. C.		'17
Adolph, A. Carldon, Student, Missouri School of Min. & Met.....	Rolla, Mo.	'29
Ady, Joseph Wesley, Jr., Min. Engr.....	314 Mining Exchange Bldg., Colorado Springs, Colo.	'21
Affelder, William Lewis, V. P., Hillman Coal & Coke Co. First National Bank Bldg., Pittsburgh, Pa.		'20
Affleck, B. F., Pres., Universal Portland Cement Co.....	210 So. La Salle St., Chicago, Ill.	'19
Agabeg, Edgar C., Cons. Min. Engr.....	Evelyn Lodge, Asansol, E. I. R. Bengal, India.	'05
†Agar, William M., Asst. Prof. of Geol., Schermerhorn Hall, Columbia Univ., New York, N. Y.		'23
Agassiz, Rodolphe L., Pres., Calumet & Hecla Consolidated Copper Co.....	Boston, Mass.	'15
†Agens, William Holmes, District Mgr., Traylor Engrg. & Mfg. Co., 605 Chester Williams Bldg., 215 W. Fifth St., Los Angeles, Cal.		'20
Ageton, Richard V.....	209 D St., S. W., Miami, Okla.	'21
†Agnew, George B.....	82 Beaver St., New York, N. Y.	'03
Agnew, J. Carson.....	906 American Bldg., Cincinnati, Ohio.	'04
Agnew, John A., Min. Engr., "Royston," West Heath Ave., Hampstead, London, N. W., England.		'09
Agnew, John L., Pres., The International Nickel Co. of Canada, Ltd. Copper Cliff, Ont., Canada.		'14
Agthe, Fred. Thomas, Engr., Allis-Chalmers Mfg. Co.....	Milwaukee, Wis.	'15
Aguerrevere, Pedro I., Geol. & Geophysicist, Foreign Dept., Henry L. Doherty & Co., 60 Wall St., New York, N. Y.		'29
Aguilar, Ponciano, Min. Engr., Engr. of Mines—La Presa 78-152 Guanajuato, Gto., Mexico.		'01
Aguiar-Reveredo, J. F.....	Box 900, Lima, Peru.	'15
Aguilera, Eugenio, Mining & Foresting Dept. of Santiago.....	Santiago de Cuba, Cuba.	'14
Agureeff, Ivan Gerasimovitch, Min. Engr.....	76 Washington Square, New York, N. Y.	'28
Abbe, Frederic R.....	Athens, Pa.	'97
Ahier, Philippe D.....	"Phaleron," R. R. I., Sidney, B. C., Canada.	'16
Ahlers, R. O., Cons. Min. Engr.....	13, Rua do Corpo Santo, Lisbon, Portugal.	'99
Ahlqvist, Harald, Cons. Engr.....	331 Madison Ave., New York, N. Y.	'21
Aicher, Charles P., Mgr., London Gold Mines Co.....	Buena Vista, Colo.	'23
†Airey, Henry T., Jr. Engr., Britannia Min. & Smelt. Co., Ltd. Britannia Beach, B. C., Canada.		'28
†Aisenbergh, Victor V., Min. Engr.....	Room 607, 79 Wall St., New York, N. Y.	'27
Aitken, Andrew D., V. P., Salt Creek Producers Assn. & Midwest Oil Co. 610 First National Bank Bldg., Denver, Colo.		'25
Akagawa, Yoshisuke, Taniguchi Mine Wks. Keigi-line, Sensen Heianhokudo, Chosen, Japan.		'25
Akashi, Takayori, Gen'l Mgr., Sado Mine, Mitsubishi Min. Co., Sadogun, Niigataken, Japan.		'27
Akin, Thomas R., Steel Manufacturing, Pres., Laclede Steel Co. 1317 Arcade Bldg., St. Louis, Mo.		'20
Alayza, Carlos, Engr.....	Sociedad de Ingenieros, Apt. 1314, Lima, Peru.	'19
Albert, Edward J.....	912 E. Price St., Philadelphia, Pa.	'19
Albertson, Floyd Eli, Student, Univ. of Idaho.....	Moscow, Idaho.	'23
Albertson, M., Shell Pet. Corp.....	Dallas Athletic Club Bldg., Dallas, Tex.	'15
†Albin, L. D., V. P., Ingersoll-Rand Co.....	11 Broadway, New York, N. Y.	'15
†Albinski, Stephan, Met., Federated Metals Corp.....	Chicago, Ill.	'23
†Alcorn, Irwin W., Chief Construction Engr., Independent Oil & Gas Co.....	Tulsa, Okla.	'22
Aldasoro, A., Min. Engr.....	6a Balderas No. 92, Mexico City, D. F., Mexico.	'02
Alden, John H., Plant Met., U. S. Aluminum Co.....	Niagara Falls, N. Y.	'21
Alden, John W., Mill Met., Central Alloy Steel Corp.....	Massillon, Ohio.	'23
Alderman, Clifford R., Refinery Engr., Technical Asst., Shell Pet. Corp. Arkansas City, Kans.		'27
†Alderman, Rupert Lewis, Attorney, 1116 Pacific Mutual Bldg., 523 West Sixth St., Los Angeles, Cal.		'21
Alderson, G. E., Min. & Met. Engr., Federated Metals Corp., Duquesne Red Branch, Farmers Bank Bldg., Pittsburgh, Pa.		'19
Alderson, Willon P., Alderson & McKay.....	New Birks Bldg., Montreal, Que., Canada.	'20
Aldrich, Charles H., Mgr., U. S. Metals Refin. Co.....	Carteret, N. J.	'25
Aldrich, Harold W., Supt., Leaching Plant, Inspiration Cons. Copper Co.....	Inspiration, Ariz.	'14
Aldrich, Henry R., Asst. State Geol. of Wisconsin, 318 Science Hall, Univ. of Wisconsin, Madison, Wis.		'20
Aldrich, T. H., Jr., Min. Engr. and Coal Operator.....	1429 33rd St. N., Birmingham, Ala.	'96
Aldrich, Truman H., Mgr.....	1310 American Trust Bldg., Birmingham, Ala.	'78
Aldridge, Walter H.....	New York Central Bldg., 75 E. 45th St., New York, N. Y.	'89
†Aldridge, Walter V., Student, Columbia Univ.....	New York, N. Y.	'23

For explanation of symbols, see page 5.



Alexander, A. M., Geophysicist, The Empire Co.....	Bartlesville, Okla.	'24
Alexander, Harry H.....	266 E. Dudley Ave., Westfield, N. J.	'14
†Alexander, Harvey B., Chemist, Experimental Station, Hercules Powder Co....	Kenvil, N. J.	'29
Alexander, Jerome, Cons. Chem. & Chem. Engr.		
	The Chemists Bldg., 50 East 41st St., New York, N. Y.	'23
Alf, Alfred I., Chem., General Lab., Anaconda Copper Min. Co.....	Great Falls, Mont.	'27
Alford, Newell G., Cons. Engr. and V. P., Howard N. Eavenson & Associates		
	1300 Union Trust Bldg., Pittsburgh, Pa.	'14
Alkins, W. E., Head, Research Dept., Messrs. Thomas Bolton & Sons, Ltd.		
	Oakamoor, Stoke-on-Trent, Staffordshire, England.	'28
Allan, Andrew, Jr., A. Allan & Son.....	Harrison, N. J.	'18
Allan, Thomas H., Dist. Geol., Midwest Exploration Co.....	Russell, Kans.	'20
Allard, Charles Norman, Chem., Northern Peru Min. & Smelt. Co.,		
	Casilla 162, Trujillo, Peru.	'26
Allderdice, Taylor.....	5727 Wilkins Ave., Pittsburgh, Pa.	'92
Allen, Andrews, Cons. Engr., Allen & Garcia Co.....	332 So. Michigan Ave., Chicago, Ill.	'20
Allen, Anson W.....	2510 Ensley Ave., Ensley, Ala.	'87
Allen, A. W., Editor, <i>Engrg. &amp; Min. Journal</i> .....	10th Ave. & 36th St., New York, N. Y.	'23
†Allen, Arthur R., Rep., The Midvale Co. of Philadelphia, Pa....	Security Bldg., Denver, Colo.	'28
Allen, Charles W., Min. Engr., Cleveland-Cliffs Iron Co.....	Ishpeming, Mich.	'25
Allen, Claude, Supt., South American Copper Co.....	Aroa, Puerto Cabello, Venezuela.	'22
Allen, George H., Republic Brass Corp.....	Rome, N. Y.	'26
Allen, Glenn Lee, Supt. of Mills, San Francisco Mines of Mexico, Ltd.		
	San Francisco del Oro, Chih., Mexico.	'28
Allen, Henry Butler.....	8112 St. Martins Lane, Chestnut Hill, Philadelphia, Pa.	'23
Allen, Horace J., Supt., Blast Furnace Dept., The Bourne-Fuller Co.		
	Upton Works, Cleveland, Ohio.	'26
Allen, John H., Met.....	Shore Road, Greenwich, Conn.	'84
Allen, Joseph Carothers, Andes Copper Min. Co.....	Chanaral, Chile.	'28
Allen, Joseph W.....	25 Broadway, New York, N. Y.	'13
Allen, L. M., Jr., Cia. Minera de San Rafael y Anexas, S. A., Apt. 79, Pachuca, Hgo., Mexico.		'16
Allen, Rolland Craten, Exec. V. P., Oglebay Norton & Co.		
	1208 Hanna Bldg., Cleveland, Ohio.	'19
Allen, Roy H., Spalding Constr. Co.....	125 E. 46th St., New York, N. Y.	'09
Allen, William R., Boston Montana Corp.....	Coolidge, Mont.	'16
Aller, Frank D., Met. Engr.....	643 6th Ave., Durango, Colo.	'19
†Alley, James Calder, James C. Alley Co.....	261 Broadway, New York, N. Y.	'23
†Alling, Harold L., Prof., Head of Dept. of Geol., Univ. of Rochester.....	Rochester, N. Y.	'19
Alling, Mark N., Min. Engr.....	284 Perkins St., Oakland, Cal.	'14
†Allison, Franklin H., Jr., Met., Crucible Steel Co. of America.....	Oliver Bldg., Pittsburgh, Pa.	'23
Allport, Hamilton, V. P., A. B. Leach & Co., Inc.....	39 S. La Salle St., Chicago, Ill.	'26
Allport, James H., Cons. Engr.....	Barnesboro, Pa.	'18
Allport, R. H., Dist. Min. Supervisor, U. S. Geol. Survey.....	308 Pratt Bldg., Billings, Mont.	'11
Almy, A. Lee.....	818 West Pine St., Deming, N. M.	'28
†Alten, George H., Owner & Director of Alten's Foundry & Machine Works,		
	Lancaster, Ohio.	'28
Altio, Karl F., Consulate General of Finland.....	5 State St., New York, N. Y.	'16
Altmayer, Maurice Ernest, Ingenieur des Arts et Manufactures,		
	145 Rue de la Pompe, Paris, France.	'18
Altshuler, H. I., Cons. Min. Engr., Cia. de Real del Monte y Pachuca, Pachuca, Hgo., Mexico.		'20
†Alvey, Glenn H., Pet. Geol., V. P., & Gen'l Mgr., Uvalde Rock Asphalt Co.,		
	510-15 Frost National Bank Bldg., San Antonio, Tex.	'20
Alworth, Cecil D., Humble Oil & Refin. Co.....	Luling, Tex.	'28
Alyea, O., Min. & Met. Engr.....	Trenton, Ont., Canada.	'26
Ambler, Charles Wilson, Jr., Asst. Testing Engr., Daisy Smelter, United Verde Extension		
	Min. Co., Clemenceau, Ariz.	'28
†Ambler, J. B., Engr.....	328 E. Willetta St., Phoenix, Ariz.	'14
Ambler, J. Owen, Smelter Supt., Copper Queen Branch, Phelps-Dodge Corp.....	Douglas, Ariz.	'11
Ambrohn, Richard, Dir. of Prospektion, G.m.b.H., Prinz Albrechtstr. 32, Goettingen, Germany.		'29
Ambrose, A. W., Mgr. of Prod., Empire Companies.....	Bartlesville, Okla.	'21
Ames, George, Gen'l Mgr., Pacific Coast Tale Co.....	2149 Bay St., Los Angeles, Cal.	'21
Ames, Richard H., Fields Supt., Cia Mexicana de Petroleo "El Aguila" S. A.,		
	Apt. 86, Puerto Mexico, Vera Cruz, Mexico.	'30
Amis, Cecil Rhodes.....	Terrerro, N. M.	'28
Ammon, Robert, Chief Met., American Zinc, Lead & Smelt. Co., Box 390, East St. Louis, Ill.		'13
Amsden, B. F.....	Box 585, Singapore, Straits Settlements.	'25
Amy, Ernest J. H.....	235 West 76th St., New York, N. Y.	'85
Anders, Frank LaFayette, Cons. Engr., Receiver, Lucky Strike Coal Co.		
	1205 6th St. So., Fargo, N. D.	'24
†Andersen, A. H.....	169 Clinton St., Brooklyn, N. Y.	'26
Anderson, A. J., Cons. Engr.....	2016 Hunter-Dulin Bldg., San Francisco, Cal.	'03

Anderson, Alexander, Min. & Pet. Engr.	Box 267, Fullerton, Cal.	'07
Anderson, Allan J., Supt., Min. Dept., Capital Engrg. Co., Ltd., New Liskeard, Ont., Canada.		'25
Anderson, Amil Abner, Cons. Geol.	721 Union National Bank Bldg., Wichita, Kans.	'15
Anderson, Andrew P., Cons. Min. Engr.	1117 Central Bank Bldg., Oakland, Cal.	'13
Anderson, Arthur N., Supt., Vanadium Corp. of America.	Bridgeville, Pa.	'20
†Anderson, Arvid E., American Cyanamid Co.	Linden, N. J.	'23
Anderson, Barclay G., Asst. Mine Supt., Allenby Plant, Granby Cons. Min. Smelt. & Power Co., Ltd., Copper Mountain, B. C., Canada.		'16
Anderson, C. O., Met., The Century Zinc Co.	Baxter Springs, Kans.	'25
Anderson, Carl Bernard, Cons. Geol. & Pet. Engr.	941 Kennedy Bldg., Tulsa, Okla.	'20
Anderson, Carl N., Cons. Min. Engr., Gen'l Mgr., Hutcheon Management Corp. Box 510, Baxter Springs, Kans.		'14
†Anderson, Carter H., Field Engr., Chas. E. Bedaux Co.	435 N. Michigan Ave., Chicago, Ill.	'28
Anderson, Edmund A., Metallographist, New Jersey Zinc Co.	Palmerton, Pa.	'29
Anderson, Francis W., North Lily Min. Co.	Eureka, Utah.	'23
Anderson, Glenn, Engr. of Mines.	46 East Broadway, Butte, Mont.	'29
Anderson, H. G. S., Min. & Met. Engr.	1321 Boston St., Muskogee, Okla.	'15
Anderson, Herbert Warren, Sr., Chem. & Met.	Box 18, Chattanooga, Tenn.	'24
Anderson, J. K., Civ. and Cons. Min. Engr. 609-611 Bank of Commerce Bldg., Charleston, W. Va.		'99
†Anderson, J. N., Noranda Mines.	Noranda, Que., Canada.	'27
†Anderson, James H., Sec. & Dir., United Verde Copper Co.	111 Broadway, New York, N. Y.	'28
Anderson, James P., Mgr. of Mines, Ringwood Co.	50 Church St., New York, N. Y.	'17
Anderson, John F.	6452 Woodcrest Ave., Overbrook, Philadelphia, Pa.	'20
Anderson, L. Douglass, Chief Engr., U. S. Smelt. Refin. & Min. Co., Salt Lake City, Utah.		'14
†Anderson, Ludlow G., Colorado & Utah Coal Co.	Box 223, Mount Harris, Colo.	'24
†Anderson, Ralph O., Structural Designer, H. M. Bylesby & Co., Engrs., Management & Finance, Bankers Bldg., Chicago, Ill.		'23
Anderson, Robert J., A. F. A., McFallen Medallist, Oct. 1925, V. P., Charge of Production, Fairmount Mfg. Co., Fairmount, W. Va.		'23
Anderson, Robert L., Min. Engr., Howard N. Eavenson & Assoc., 1300 Union Trust Bldg., Pittsburgh, Pa.		'23
†Anderson, Walter W., Student, Univ. of Illinois.	Urbana, Ill.	'27
Anderson, William G., Min. Engr.	519 N. Sacramento St., Stockton, Cal.	'09
Andreas, Alexander, Jr.	921 8th St., Las Vegas, N. M.	'20
Andreen, Harry Mayo, Pet. Geol., Geol. Dept., The Carter Oil Co.	Box 2045, Tulsa, Okla.	'15
Andrescu, Mircea Raul.	Moreni, Prahova, Romania.	'28
Andreev, V. N., Min. Engr., Production Dept., International Pet. Co., Negritos via Talara, Peru.		'21
Andresen, John Henry.	564 Riverside Dr., New York, N. Y.	'22
Andrew, Arthur R., Cons. Oil Geol.	109 Wallace Pl., New Plymouth, New Zealand.	'20
Andrew, Thomas, Min. Engr.	Rand Club, Johannesburg, Transvaal, S. Africa.	'94
Andrews, Avery D., American Rep., Royal Dutch Shell Group.	65 Broadway, New York, N. Y.	'21
Andrews, Charles Bradley, Dev. Engr., Taylor-Wharton Iron & Steel Co.	High Bridge, N. J.	'24
Andrews, Charles W., V. P., H. A. Brassert & Co.	310 S. Michigan Ave., Chicago, Ill.	'13
Andrews, E. C., Government Geol., Dept. of Mines, Geol. Survey.	Sydney, N.S.W., Australia.	'28
Andrews, Worth B., Min. Engr. & Oil Operator, 506 Texas National Bank Bldg., Ft. Worth, Tex.		'20
†Angell, William Raymond, Asst. Met., U. S. Naval Gun Factory, Met. Div., Washington, D. C.		'24
†Angove, John, Min. Engr., Burmah Corp., Ltd., Bawdwin, Federated Shan States, Burma, India.		'24
Angst, Harry H.	Box 92, Crosby, Minn.	'20
Angus, D. H., Mgr., Gold Hill Mines, Ltd.	Haileybury, Ont., Canada.	'21
Anschutz, C. H.	1200 East Linwood Blvd., Kansas City, Mo.	'25
Antisell, Frank L.	R. F. D. 2, Box 29, Matawan, N. J.	'14
†Antonova, Helen A., (Miss) Met., Joseph Mayer Jewelry Co., 81 Marion St., Seattle, Wash.		'28
†Antoshkin, Dmitry E., Min. Engr., Walker Min. Co.	Spring Garden, Cal.	'26
Antz, Eugene, Met.	Homestead, Ore.	'99
†Aoyama, Hidesaburo, Asst. Prof., Imperial Univ.	Tokyo, Japan.	'20
Apgar, Frederick W., Min. Geol.	Canonbury Road, Jamaica, N. Y.	'11
Aplin, William, Principal, Beechworth Technical School.	Beechworth, Victoria, Australia.	'08
Apolant, Stanley L., Anglo-Chilean Cons. Nitrate Corp.	120 Broadway, New York, N. Y.	'21
Appleby, William R., Dean, School of Mines, University of Minnesota.	Minneapolis, Minn.	'90
Applegate, J. S., Sales Engr., Sterling Varnish Co.	Haysville, Pa.	'15
Arakawa, Eiji, Min. & Met. Engr., Sumitomo Co., Ltd., Sumitomo, Goshi, Kaisha, Kitahama, Osaka, Japan.		'17
†Arana, Luis A.	Apt. 37, Iquitos, Peru.	'27
Archbald, James, Jr., Min. Engr. & Agent, Girard Estate, Gen'l Mgr., Girard & Hammond Water Cos., 405 Thompson Bldg., Pottsville, Pa.		'08

For explanation of symbols, see page 5.



Archer, Robert S., Met., Aluminum Co. of America.....	2210 Harvard Ave., Cleveland, Ohio.	'19
Archibald, John Christie, Min. Engr.....	3820 Ft. Boulevard, El Paso, Tex.	'16
Archibald, Ralph S., Cons. Min. Geol.....	Negaunee, Mich.	'20
Archila M., Manuel J.....	Calle 16, No. 111 Bogota, Colombia.	'27
Argabrite, William Graeme, Geol., Standard Oil Co. of New Jersey, Room 1560, 26 Broadway, New York, N. Y.		'28
Argall, Joseph, Min. Engr., Nantymwyn Mine.....	Llandoverly, S. Wales.	'03
Argyle, J. Sterling.....	Spanish Fork, Utah.	'24
Armit, Robert L., Min. Engr., Mgr., Cia. Minera San Jose de los Llanitos & Cia. Minera La Zambranena, S. A., c/o Banco de Londres y Mexico, Mexico City, D. F., Mexico.		'21
†Armitage, Paul, Attorney-at-law.....	233 Broadway, New York, N. Y.	'18
Arms, Ray W., V. P., Roberts & Schaefer Co.....	1110 Wrigley Bldg., Chicago, Ill.	'20
Armstead, Daniel McPherson, Director, Gardner-Denver Co.....	56 Kingsway, London, England.	'09
Armstead, Henry H., Pres., Armstead Mines, Inc.....	Kaslo, B. C., Canada.	'00
Armstrong, A. Bruce.....	Box 716, Warren, Ariz.	'16
†Armstrong, Albert Hall, Sec., Anthracite Bureau of Information, 437 Chestnut St., Philadelphia, Pa.		'20
Armstrong, Clifton T., Min. Engr.....	Address Wanted.	'17
Armstrong, Frank H., Engr., Link-Belt Co.....	300 W. Pershing Rd., Chicago, Ill.	'14
†Armstrong, G. C.....	Box 566, Sudbury, Ont., Canada.	'24
Armstrong, George C., Pres., Lawrenceville Publishing Co.....	Lawrenceville, Ill.	'15
†Armstrong, Harold, By-Product Chem., Corrigan McKinney Steel Co.....	Cleveland, Ohio.	'27
Armstrong, L. K., Cons. Min. Engr.....	722 Peyton Bldg., Spokane, Wash.	'07
Armstrong, P. A. E., Cons. Engr.....	875 Park Ave., New York, N. Y.	'24
Arnold, C. E. Le N., Min. Engr.....	Room 1800, 25 Broadway, New York, N. Y.	'06
†Arnold, H. H., Jr., Pet. Engr., The Texas Co.....	Drawer F, Houston, Tex.	'27
Arnold, Howard Clinton, Cons. Ceramic Engr.....	Momence, Ill.	'20
Arnold, John B., Attorney-at-law.....	604 Manhattan Bldg., Duluth, Minn.	'14
Arnold, L. L., V. P., Leach Steel Corp.....	80 Adele St., Rochester, N. Y.	'20
Arnold, Ralph, Independent Cons. Geol.....	812 Subway Terminal Bldg., Los Angeles, Cal.	'12
Arnot, Stanley L., Min. Engr., Plymouth Cons. Gold Mines, Ltd., Plymouth, Amador Co., Cal.		'17
Arthur, Edward P., Jr., Min. Engr.....	Cripple Creek, Colo.	'97
†Arthur, John E., 3rd, Wks. Mgr., Union Electric Steel Corp.....	Carnegie, Pa.	'20
Arthur, Walter, Chem. & Met., Graduate Student, Mass. Inst. of Tech.....	Cambridge, Mass.	'18
Ash, S. H., Assoc. Min. Engr., U. S. Bureau of Mines, 4317 5th Ave., N. E., Seattle, Wash.		'15
Ashbaugh, Lewis E., Cons. Engr.....	413 Tabor Bldg., Denver, Colo.	'29
Ashley, George H., State Geol., State Capitol.....	Harrisburg, Pa.	'90
†Ashman, George W., Research Investigator, New Jersey Zinc Co.....	Palmerton, Pa.	'25
Ashmead, Dever C., Cons. Min. Engr.....	801 Coal Exchange Bldg., Wilkes-Barre, Pa.	'21
Ashmore, G. Percy, Min. & Met. Engr., Mngng. Dir., West African Diamond Syndicate, Pinners Hall, Austin Friars, London, E. C. 2, England.		'97
Ashton, Frank, Min. Engr.....	518 S. Westmoreland Ave., Los Angeles, Cal.	'00
†Ashton, James Jackson, Transitman, Tennessee Coal, Iron & R. R. Co., Ishkooda Mines, Birmingham, Ala.		'24
Aston, James, Prof., Min. & Met., Carnegie Inst. of Tech.....	Pittsburgh, Pa.	'26
Atcherson, R. W. H., Blast-Furnace Supt., Illinois Steel Co.....	Gary, Ind.	'19
Atherholt, Gordon Meade.....	724 Ninth St. N. W., Washington, D. C.	'24
Atherton, T. W. T., Min. Engr.....	Kagesman, Kars, Obi, U.S.S.R.	'92
Atkins, David, Met. Engr., Partner, Atkins, Kroll & Co., 260 California St., San Francisco, Cal.		'21
Atkins, Samuel E., Drilling Contractor, S. E. Atkins Co.....	710 Alworth Bldg., Duluth, Minn.	'20
Atkinson, Guy.....	55 Liberty St., New York, N. Y.	'20
†Atkinson, H. E., Mgr., The Atkinson Co.....	575 Lyell Ave., Rochester, N. Y.	'19
Atkinson, Louis W., Coal Min. Engr.....	1724 "Q" St., Washington, D. C.	'20
Atkinson, Sheridan K., Pres. & Gen'l Mgr., Idaho Gold Dredging Corp., Box 1340, Boise, Idaho.		'23
Atwater, R. M., Jr., Min. Engr., Ladenburg-Thalman & Co., 25 Broad St., New York, N. Y.		'97
Auchmuty, R. Laird, Min. Engr., Howard N. Eavenson & Associates, 1300 Union Trust Bldg., Pittsburgh, Pa.		'23
†Aucoin, Riley A., Dist. Pet. Engr., Humble Oil & Refin. Co.....	Box 1177, Jacksonville, Tex.	'28
Audibert, Paul, Direttore Miniere gennamari.....	Ingurtozu, (Cagliari) Italy.	'29
†Aufderhaar, H. C., Asst. Met., Stockham Pipe & Fittings Co.....	Birmingham, Ala.	'29
Augsburger, Clyde, Min. Engr., Charge Engrg., National Fire Proofing Co., East Canton, Ohio.		'29
Austin, Albert M.....	Rooms 3417-18, Equitable Bldg., 120 Broadway, New York, N. Y.	'05
Austin, Bert C., Min. Engr.....	Mills Bldg., San Francisco, Cal.	'27
Austin, Charles L., Assayer, Highland Boy Mine, Utah Cons. Min. Co., Bingham Canyon, Utah.		'19
Austin, E. A., Min. Engr.....	912 Hobart Bldg., San Francisco, Cal.	'08
Austin, Edgar Taylor, Smelter Supt., Mond Nickel Co., Ltd.....	Coniston, Ont., Canada.	'14

Austin, John F., Met.	Murray, Utah	'10
Austin, John W., Mine Supt., Southern Gypsum Co.	North Holston, Va.	'17
Austin, Miner M., Met., Fansteel Products Co.	North Chicago, Ill.	'29
Austin, W. Lawrence, Min. Engr.	Box 452, Riverside, Cal.	'82
d'Autremont, Charles M., Min.	910 Consolidated National Bank Bldg., Tucson, Ariz.	'20
†Averill, Charles Volney, Min. & Geol. Engr.	2421 Roosevelt St., Berkeley, Cal.	'20
Avery, D., Met., Collins House	Collins St., Melbourne, Vic., Australia.	'17
Avery, Howard Shaeffer	206 Virginia Ave., Virginia Heights, Roanoke, Va.	'27
Avery, John, Met. Engr.	52 Sutherland Road, Armadale, Melbourne, Vic., Australia.	'03
Avery, Paul W., Met. Engr., Cons. Met., Amparo Min. Co.,	151 Embarcadero Rd., Palo Alto, Cal.	'18
†Avril, Arthur C., Pres., Avril Tru-Batch Concrete Inc.	Este Ave. & B. & O. R.R., Cincinnati, Ohio.	'25
Axtell, Wayne O., Cons. Engr.	Room 800, 209 S. La Salle St., Chicago, Ill.	'26
†Ayer, Charles F., Pres., Magma Copper Co.	14 Wall St., New York, N. Y.	'21
Ayer, Frank A., Mgr., Morenci Branch, Phelps Dodge Corp.	Morenci, Ariz.	'14
Ayres, W. S., Cons. Min. & Mech. Engr.	547 N. Church St., Hazleton, Pa.	'73
†Baash, Lawrence F., Pres., Baash-Ross Tool Co.	Box 1110, Arcade Station, Los Angeles, Cal.	'24
Babb, P. A., Min. & Met. Engr.	Apt. 2147, Mexico City, D. F., Mexico.	'06
Babbitt, T. D., Min. Engr.	Nampa, Idaho.	'99
Bacon, Ira Preston, Jr., American Smelt. & Refin. Co.	Hayden, Ariz.	'28
Bacon, Maurice W., Min. Engr., Pres., Montizona Copper Co.	42 Broadway, New York, N. Y.	'14
Bacon, Raymond F., Cons. Chem. Engr.	271 Madison Ave., New York, N. Y.	'14
Bacorn, H. C., V.P. & Gen'l Mgr., Jardine Min. Co.	Jardine, Mont.	'23
Baden, Martin W., Chief Geol., Benedum-Trees Oil Co.	Box 520, Winfield, Kans.	'30
Badgley, C. W., St. Joseph Lead Co.	Herculaneum, Mo.	'16
†Baekeland, George, V.P., Bakelite Corp.	247 Park Ave., New York, N. Y.	'19
Baertl, Ernest A., Min. Engr., Supt., Colquijirca Mines	Cerro de Pasco, Peru.	'24
Bagaeff, Nicholas Z., Commercial Engr.	Room 1726, 165 Broadway, New York, N. Y.	'28
Bagg, Rufus Mather, Bronze Medal Award, France, 1900, Sulphide Mineral Exhibit, U. S. Exposition; Prof., Geol. & Mineralogy, Lawrence College, Appleton, Wis.		'07
†Bagley, Earle M., Supt., Majestic Mines Corp.	Beowawe, Nev.	'19
Bagna, Giuseppe, Met. Engr., Fiat-Ferriere Piemontesi.	Torino, Italy.	'28
Bagsar, A. B., Research Met., International Nickel Co., Inc.	Huntington, W. Va.	'24
Bahmer, Starling P.	130 4th St. S. W., New Philadelphia, Ohio.	'24
†Bailey, A. K., Jr., Supt., Milluni Mine, Fabulosa Mines Cons.	La Paz, Bolivia.	'21
Bailey, H. D., Assayer, Yellow Pine Co.	Yellow Pine, Idaho.	'27
**Bailey, Heyward C., Underground Transit-man, Nevada Cons. Copper Co.,	Box 63, Santa Rita, N. M.	'29
Bailey, James B.	Pine Forge, Berks Co., Pa.	'00
Bailey, Melbourne, Mgr., Mt. Reuben Mine	Box 687, Grants Pass, Ore.	'05
Baillie, Frank S.	East Lawn, Folsom Blvd., at 46th St., Sacramento, Cal.	'03
Bain, C. Kremer, St. Joseph Lead Co.	Bonne Terre, Mo.	'17
Bain, Edgar C., Robert W. Hunt Metallist, A. I. M. E. 1929; Met., U. S. Steel Research Laboratory, Federal Shipbuilding Co., Kearny, N. J.		'20
†Bain, George W., British Assn. Medal, McGill Univ., 1921; Presidents Gold Medal, C. I. of M. & M.; Instr. in Geol., Amherst College, Amherst, Mass.		'20
Bain, H. Foster, Sec., American Inst. of Min. & Met. Engrs.	29 West 39th St., New York, N. Y.	'97
Bains, Thomas M., Jr., Assoc. Prof. of Geol., Oregon State College	Corvallis, Ore.	'17
Bair, James Gibson, Student, Carnegie Inst. of Tech.	Pittsburgh, Pa.	'28
Baird, D. B.	Box 303, Steubenville, Ohio.	'20
Baird, Dudley, Met. & Mech. Engr., Pacific Foundry Co.	Harrison & 18th Sts., San Francisco, Cal.	'02
Baker, C. L., M. Advisory Com., American Smelt. & Refin. Co.	Room 3459, 120 Broadway, New York, N. Y.	'16
Baker, Charles J. S., Civ. Engr. & Met., Grove Lodge, Church End, London, N. 3, England.		'08
Baker, Crosby F., Prof. of Analytical Chem., Tufts College	Tufts College, Mass.	'21
Baker, David, Met. Engr.	c/o James B. Ladd, 1011 Chestnut St., Philadelphia, Pa.	'86
Baker, David, Jr., Cons. Engr.	Victory Bldg., 1011 Chestnut St., Philadelphia, Pa.	'17
Baker, Donald R., Min. Engr., Mgr., Ralph-Baker Corp.	Borger, Tex.	'25
Baker, Fred Sherman, Insular Lumber Co.	Fabrica, Negros, P. I.	'14
Baker, Harry A., Prof. of Physics, John Tarleton Agricultural College	Stephenville, Tex.	'18
Baker, J. Raymond, Student, Univ. of Wyoming	Laramie, Wyo.	'25
Baker, James Seldon	Superior, Ariz.	'29
Baker, John A., Min. Engr.	Westport, Conn.	'20
Baker, Norval E., Geol., Standard Oil Co. of N. J.	Room 1567, 26 Broadway, New York, N. Y.	'24
Baker, Thomas C., Gen'l Mgr., Fresnillo Unit, The Mexican Corp. S. A.,	Fresnillo, Zac., Mexico.	'17



Baker, William A., Jr.	Apt. 657, Tampico, Tamps., Mexico.	'17
Bakewell, Donald C., Pres.	Duquesne Steel Foundry, Farmers Bank Bldg., Pittsburgh, Pa.	'19
Balconi, R. L., Min. Engr.	Pickands, Mather & Co., Palmer, Mich.	'24
Balderson, Vearle W., Asst. Engr.	Bureau of Valuation, Interstate Commerce Commission, Washington, D. C.	'28
†Baldwin, I. W., Mgr., Min. Section,	Westinghouse Electric & Mfg. Co., 150 Broadway, New York, N. Y.	'23
†Baldwin, R. L., Sales Mgr., Republic Carbon Co., Inc.	Niagara Falls, N. Y.	'20
Baldwin, William S., Min. Engr.	170 South Broadway, Nyack, N. Y.	'06
Balfour, J. Fordyce	Eversley, Portobello, Edinburgh, Scotland.	'04
Ball, C. Leonard, Cons. Engr., Dir. Gen'l, Dept. Min. & Pet., Republic of Bolivia,	Casilla 696, La Paz, Bolivia.	'19
Ball, Edwin M., Gen'l Supt., Ore Mines & Quarries, Muscoda Mines,	Tennessee Coal, Iron & R.R. Co., Bessemer, Ala.	'15
Ball, Max W., Geol., Pres., Argo Oil Co.	First National Bank Bldg., Denver, Colo.	'14
Ball, Sydney H., Min. Geol., Rogers, Mayer & Ball,	12th floor, 26 Beaver St., New York, N. Y.	'07
Ball, Tom Lee, Gulf States Steel Co.	1004 Brown-Marx Bldg., Birmingham, Ala.	'18
Ballard, P. A., Valuation & Pet. Engr., Room 866, Naional Bess. Bldg., Washington, D. C.		'19
Ballard, T. J., Pickands, Mather & Co.	Crosby, Minn.	'25
Balling, William Marshall, Min. Engr. & Gen'l Supt., Western Borax Co.	Muroc, Kern Co., Cal.	'22
Ballmer, Gerald J., Geol., Chino Mines, Nevada Cons. Copper Co.	Santa Rita, N. M.	'25
Balmforth, A. J., Supt., Calumet & Arizona Min. Co.	.85 Branch, Valedon, N. M.	'20
Balta, J., Min. Engr., Prof., School of Mines	Lima, Peru.	'02
Baltzell, Will H., Chief Engr., Canadian Steel Corp., Ltd.	Ojibway, Essex Co., Ont., Canada.	'19
Bamberger, Ernest, Min. Engr., Pres. & Treas., Keystone Min. Co.	Box 1328, Salt Lake City, Utah.	'25
Bancroft, George Ross, Cons. Min. Engr., Dominion Metals Investment Co.,	313-14 Crown Bldg., 615 Pender St. W., Vancouver, B.C., Canada.	'21
Bancroft, Howland, V.P. & Gen'l Mgr., Lago Pet. Corp.	Apt. 172, Maracaibo, Venezuela.	'09
Bancroft, J. Austen, Cons. Geol., Anglo American Corp. of South Africa, Ltd.	Broken Hill, N. Rhodesia, Africa.	'20
Bandy, Percy J.	Box 447, Vancouver, B.C., Canada.	'16
Banister, Robert T., Student, School of Mines, Columbia Univ.	New York, N. Y.	'28
Banks, H. P., V.P. & Mgr., I. F. Laucks, Inc.	314 Maritime Bldg., Seattle, Wash.	'19
Banks, Harold P., Min. Engr., Mgr., Ore & Metal Dept., W. R. Grace & Co.,	7 Hanover Sq., New York, N. Y.	'15
Banks, John H., Min. Engr. & Met., John H. Banks & Son	26 John St., New York, N. Y.	'83
Banks, Leon M.	1205 Elm St., Marysville, Kans.	'17
Banks, Robert T.	S. 120 Lincoln St., Spokane, Wash.	'20
†Bannister, William J.	3 Merrylee Wood, Newlands, Glasgow, Scotland.	'29
Bannon, Thomas C.	2744 Grand Ave., Huntington Park, Cal.	'24
Banon, E. Magawly, Examining Engr., Dawes Bros.	111 Monroe St., Chicago, Ill.	'19
Banon, Henry C., Min. Engr.	Box 144, Chemainus, B.C., Canada.	'90
Baraboshkin, Nicolas, Prof. of Met., Ural Univ.	Sverdlovsk, Ekaterinburg, U.S.S.R.	'25
Baragwanath, John G., Min. Engr.	52 Vanderbilt Ave., New York, N. Y.	'15
Barba, W. P.	2232 Fidelity Bldg., Broad & Walnut Sts., Philadelphia, Pa.	'18
Barber, Cecil Thomas, Resident Government Geol., Office of the Warden,	Yenangyaung, Upper Burma, India.	'28
Barber, George M., Min. & Met. Engr.	42 Clapham Rd., Bedford, England.	'02
Barber, Max H., Min. Engr., District Supt., The Cleveland-Cliffs Iron Co.,	South Hibbing, Minn.	'15
Barber, Ray J.	1067 Monadnock Bldg., 681 Market St., San Francisco, Cal.	'29
Barber, Theodore S., Gen'l Mgr. & Treas., Morris Run Coal Min. Co.	Miners Bank Bldg., Wilkes-Barre, Pa.	'21
Barbour, Charles C.	East Helena, Mont.	'24
Barbour, Percy E., Gold Medal, S. of A. M. E., 1928; Min. Engr., Sec. & Treas., Min. & Met. Society of America, 2 Rector St., New York, N. Y.		'03
Barbour, Thomas J., Cons. Engr.	1000 California St., San Francisco, Cal.	'97
Barcena y Diaz, Leopoldo, Min. Engr., Real Cia, Austuriana de Minas	Torrelavega, Spain.	'23
Bardill, John Duclos, Experimental Met., Cia Minera de Penoles, S. A.,	Temisco, Guerrero, Mexico.	'27
Bardwell, Alonzo F., Assayer & Chem.	158 S. W. Temple St., Salt Lake City, Utah.	'89
Bardwell, Carlos, Asst. Supt., International Smelt. Co.	Tooele, Utah.	'23
Bardwell, Earl S., Supt. of Copper Refineries, Anaconda Copper Min. Co.	Great Falls, Mont.	'13
Barkdoll, I. H., Gen'l Mgr., Old Dominion Co.	Globe, Ariz.	'16
Barke, A. C.	645 E. Holt Ave., Pomona, Cal.	'18
†Barker, Clifton T., Asst. Engr., U. S. Engrg. Dept., U. S. Gov't,	707 Postal Telegraph Bldg., Kansas City, Mo.	'22

# 12 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Barker, E. E., Min. Engr., Engr. of Mines, Utah Copper Co.	Box 1775, Salt Lake City, Utah.	'16
Barker, H. A., Min. & Met. Engr., The Dorr Co.	247 Park Ave., New York, N. Y.	'02
Barker, Pierce, Met., Federated Metals Corp.	11630 Russell St., Detroit, Mich.	'13
Barker, Ralph F., Met., Gen'l Supt., Tacoma Smelter, American Smelt. & Refin. Co.,	Box 1605, Tacoma, Wash.	'16
Barker, Samuel, Jr., Min. Engr.	15 W. Broadway, Butte, Mont.	'00
Barlow, Cecil	2323 E. Kellogg St., Wichita, Kans.	'24
Barlow, James, Min. Engr., Dist. Engr., Anglo-Greek Magnesite Co., Ltd.,	Limni, Island of Euboea, Greece.	'26
Barnard, E. A., Met., Anaconda Copper Min. Co.	Anaconda, Mont.	'12
Barnes, Blakeslee, Min. Engr., Aluminum Co. of America	Oliver Bldg., Pittsburgh, Pa.	'20
Barnes, John F., Hudson Coal Co.	Scranton, Pa.	'26
Barneson, John, Pres., General Petroleum Corp.	310 Sansome St., San Francisco, Cal.	'15
Barnett, Maurice, Sec. & Treas., Casein Co. of America	15 Park Row, New York, N. Y.	'93
Barnett, William John, The Mining & Metallurgical Club,	3 London Wall Bldgs., London, E.C.2, England.	'02
Barnsdall, T. N.	146 W. Washington St., Bradford, Pa.	'17
Barnum, Walter, Pres., The Pacific Coast Co.	250 Park Ave., New York, N. Y.	'26
Barnwell, George F.	c/o Ned. Kol. Pet. Mij., Weltevreden, Java, D.E.I.	'27
Barnwell, Lloyd R., Smoke Engr., Bunker Hill & Sullivan Min. Co.,	Box 746, Kellogg, Idaho.	'26
Barquist, William S.	514 Harvard N., Seattle, Wash.	'26
Barr, James Allen, Cons. Min. Engr., International Agricultural Corp.	Mt. Pleasant, Tenn.	'14
Barrell, Robert W., Cons. Min. Engr., Met. & Chem., Pres., St. Louis Sampling & Testing Works, Inc.,	211A S. Seventh St., St. Louis, Mo.	'99
Barrera, Tomas, Geol. & Min. Engr., Instituto Geologico de Mexico,	6a del Cipres 176, Mexico City, D.F., Mexico.	'22
Barrett, Leslie Park, Jones & Laughlin Steel Corp.,	Jones & Laughlin Bldg., Pittsburgh, Pa.	'17
Barrett, W. Gladstone, Geol. & Mgr., Missouri Lead, Inc.	Farmington, Mo.	'26
Barringer, D. M., Cons. Min. Engr. & Geol.	1242 Real Estate Trust Bldg., Philadelphia, Pa.	'90
Barrington, Walter D., Mgr., Engrg. Service, The Consolidation Coal Co., Inc.,	15 Broad St., New York, N.Y.	'23
Barron, George D.	Box 596, Rye, N. Y.	'01
Barron, William A., Cons. Engr., Fraser & Chalmers Engineering Works,	Magnet House, Kingsway, London, W.C.2., England.	'20
Barrows, Walter A., Jr., V.P., Barrows & Co., Inc.	Room 902, 1500 Walnut St., Philadelphia, Pa.	'90
Barry, Charles W.	Box 248, Idaho Springs, Colo.	'19
Barry, D. A., Supt., The North American Min. Co.	Box 248, Idaho Springs, Colo.	'18
Barry, John G., Chief Engr., Exploration Dept., Howe Sound Co.,	613 Mills Bldg., El Paso, Tex.	'20
Barth, Carl G., Jr., Min. Engr.	Hillside, Yavapai Co., Ariz.	'15
Barth, Ernest, Pet. Geol., Direccion General de Minas y Petroleo,	Casilla de Correo 281, La Paz, Bolivia.	'16
Bartholomew, Erwin Luther, Min.	827 N. Fourth Ave., Tucson, Ariz.	'20
Bartholomew, G. P., American Smelt. & Refin. Co.	120 Broadway, New York, N. Y.	'16
Bartholomew, William Fayette	50 Congress St., Boston, Mass.	'14
Bartlett, C. Elmer	2 Corona Apt., Salt Lake City, Utah.	'25
Bartlett, Edward E., Mgr., Bartlett Collins Glass Co.	Sapulpa, Okla.	'16
Bartlett, John R., Asst. Gen'l Supt. of Mines, Anaconda Copper Min. Co.	Butte, Mont.	'27
Bartlett, R. L., Min. Engr.	R.D. No. 2, Bethlehem, Pa.	'24
Bartlett, Sidney S.	Address Wanted.	'24
Barton, Cecil L., Pet. Engr.	2501 Chestnut Ave., Long Beach, Cal.	'23
Barton, Donald C., Cons. Geol. & Geophysicist	717 Petroleum Bldg., Houston, Tex.	'20
Barton, Joseph C., Gen'l Mgr., Kansas Explorations, Inc.	Cosgrove Bldg., Joplin, Mo.	'17
Bartram, John G., Geol., Midwest Refin. Co.	Denver, Colo.	'13
Bartram, Paul L., Midwest Exploration Co.	Abilene, Tex.	'26
Barwick, Arthur Richardson, Charge, Geol. Dept., Catholic Univ. of America,	Washington, D. C.	'27
Barzin, H., Engr.	Chituru, Likasi, Katanga, Belgian Congo, W. Africa, Via Cape Town.	'20
Bascom, Florence, (Miss), Geol. Prof., Dept. of Geol., Bryn Mawr College, Bryn Mawr, Pa.		'20
Basombrio Echenique, Luis, Min. Engr., The Northern Peru Min. & Smelt. Co.,	Leon de Andrade, 586, Lima, Peru.	'25
Bassett, A. F., Min. Engr., Mngng. Dir., General Motors of Brazil, S. A.,	Caixa Postal N 2912, Sao Paulo, Brazil.	'15
Bassett, Charles Fernando, Dist. Res. Geol., Lago Pet. Corp.,	Apt. 172, Maracaibo, Venezuela.	'28
Bassett, George B., Pres. & Gen'l Mgr., Buffalo Meter Co.	2917 Main St., Buffalo, N. Y.	'18
Bassett, R. H., Chief Engr., Hanna Ore Min. Co.	Hibbing, Minn.	'19

For explanation of symbols, see page 5.



Bassett, William H., James Douglas Medallist, A.I.M.E., 1925; Tech. Supt. & Met., The American Brass Co., Waterbury, Conn.	'92
Bassett, William H., Jr., Asst. Met., The American Brass Co.....	Waterbury, Conn. '25
†Basso, Charles E., Sec.-Treas., M. Board of Directors, California Premier Mines Co., Colfax, Cal.	'26
Bastin, Edson S., Geol., Chairman, Dept. of Geol., Rosenwald Hall, Univ. of Chicago, Chicago, Ill.	'13
†Batchelder, W. O., Asst. Dist. Mgr., General Electric Co., Room 1657, 230 S. Clark St., Chicago, Ill.	'13
Batcheller, J. H., Cons. Min. Engr.....	963 Adams St., Corvallis, Ore. '00
Bate, Stephen Conrad Clavell, The Tin Fields of Northern Nigeria, Ltd., Jos, Northern Provinces, Nigeria, W. Africa.	'25
Bateman, Alan M., Min. Geol., Prof., Economic Geol., Drawer C, Yale Station, New Haven, Conn.	'13
†Bateman, Glen L., Chem. Engr., c/o Mr. Edw. L. Bateman, Box 1671, Johannesburg, Transvaal, S. Africa.	'27
Bates, Bennett R., Min. & Met. Engr., Bates Co., Engrs., 327 Bradbury Bldg., Los Angeles, Cal.	'17
Bateson, C. E. W., Wardman Park Hotel, Connecticut Ave. & Woodley Rd., Washington, D. C.	'01
Baton, George S., Cons. Min. Engr.....	2412 First National Bank Bldg., Pittsburgh, Pa. '19
Batten, H. L., Cons. Min. Engr.....	1001 Vancouver Block, Vancouver, B.C., Canada. '14
†Battey, William Aldrich, V.P., Pennsylvania Crusher Co., Liberty Trust Bldg., Broad & Arch Sts., Philadelphia, Pa.	'22
Bauer, Eric Philip, Mine Supt., Southwestern Cons. Graphite Co.....	Burnet, Tex. '28
Bauermann, M. K. H., Min. Engr. & Pet. Geol., De Bataafsche Pet. Maatschappij, 30 Carel van Bylandtlaan, The Hague, Netherlands.	'23
**Bauman, Edwin Ramond, Mgr., Research & Service Dept., Trade Press Publishing Corp., 542 S. Dearborn St., Chicago, Ill.	'29
Baumann, John L.....	911 Booneville Ave., Springfield, Mo. '27
Baumer, Arthur T., Wks. Mgr., Milwaukee Steel Fdry. Co., 101 S. Water St., Milwaukee, Wis.	'25
Baumgarten, K., Min. Engr. & Geol., San Diego Trust & Savings Bank....	San Diego, Cal. '05
†Bautz, Robert A., Min. & Jobbing Non-Metallic Minerals, 236 N. Clark St., Chicago, Ill.	'28
Baxter, C. H., Prof. of Min. Engrg. & Economics, Michigan College of Mines Houghton, Mich.	'12
Baxter, H. A., Met. Engr., Mgr., Steel Sales, Henry Disston & Sons, Inc., Philadelphia, Pa.	'18
Baxter, J. C., V.P., A. Guthrie & Co., Inc.....	10 E. Fortieth St., New York, N. Y. '27
†Bayard, Kenneth Oscar, Student, Min. Engrg., Univ. of Ariz.....	Tucson, Ariz. '28
Bayles, Frederick P., Cons. Min. Engr.....	1220-21 Union Trust Bldg., Cincinnati, Ohio. '13
†Bayles, George E., Engr., The Buckeye Coal Co.....	Nemacolin, Pa. '23
Bayless, I. N., Gen'l Supt., Utah Fuel Co.....	Castlegate, Utah. '27
Bayless, Ray T., Met. & Editor, American Society for Steel Treating, 7016 Euclid Ave., Cleveland, Ohio.	'25
†Bayliss, Willard Z, Student, School of Mines, Univ. of Minnesota.....	Minneapolis, Minn. '29
Beal, Carl H., Pet. Geol. & Engr.....	Quinby Bldg., 7th & Grand, Los Angeles, Cal. '20
Beall, Robert Stephens, District Sales Mgr., New Jersey Zinc Sales Co., 1105 Merchants Exchange Bldg., San Francisco, Cal.	'18
Beam, A. W., Pres. & Gen'l Mgr., Benguet Cons. Min. Co., Box 10, Baguio, Benguet, P. I.	'23
Beam, John C., Westchester County Sanitary Commission.....	White Plains, N. Y. '20
Bean, Ernest F., State Geol., State Geological Survey.....	Madison, Wis. '20
Beard, James T., Civ., Min. Engr.....	58 Washington Ave., Danbury, Conn. '06
†Beard, Raymond R., Research Met., Patino Mines & Enterprises Cons., Inc., Llallagua, Bolivia.	'27
†Beardsley, William R., Gas Measurement Engr., Colorado Interstate Gas Co.; Canadian River Gas Co., 308 Colorado Springs National Bank Bldg., Colorado Springs, Colo.	'26
Beasley, Alfred F., Asst. Supt. of Smelter, Bunker Hill & Sullivan Min. & Conc. Co. Kellogg, Idaho.	'18
Beasley, Walter H., Min. & Met. Engr., Minerals Separation, Ltd., 62 London Wall, London, E.C.2, England.	'24
Beath, C. Philip, Met. Engr., Western Electric Co.....	Hawthorne Sta., Chicago, Ill. '27
Beattie, Harry J.....	1804 Eastern Parkway, Schenectady, N. Y. '25
Beatty, A. Chester, Cons. Engr.....	25 Broad St., New York, N. Y. '06
Beaudin, Philip F., Gen'l Mgr., The East Butte Copper Min. Co.....	Butte, Mont. '28
Beaver, A. B., Chem. & Engr. of Tests, National Cash Register Co.....	Dayton, Ohio. '18
Beaver, James J., Supt., Ore Mines, Gulf States Steel Co.....	Shannon, Ala. '19
†Beck, August F., Geol. Dept., Torsion Balance Survey, Carter Oil Co., Box 2045, Tulsa, Okla.	'22
Beck, Erich A., V.P., Chromium Corp. of America.....	120 Broadway, New York, N. Y. '12

Beck, Wesley J., Director of Research, The American Rolling Mill Co., Middletown, Ohio.	'20
Becker, Clyde M., Geol., Becker-Reed Oil & Gas Co., 224 So. 14th, Chickasha, Okla.	'20
Becket, Frederick M., V.P., Union Carbide Co. & Electro Met. Co., 30 East 42nd St., New York, N. Y.	'19
Beckett, Percy G., Min. Engr., Phelps Dodge Corp., Douglas, Ariz.	'13
Beckstrom, R. C., Dean of Pet. Engrg., Univ. of Tulsa, Tulsa, Okla.	'29
†Beckwith, Earl, Cia. Carbonifera de Sabinas, Zinc Plant, Rosita, Coah., Mexico.	'28
Beckwith, Henry Rea, Northern Aerial Minerals Exploration, Ltd., Sioux Lookout, Ont., Canada.	'24
Beckwith, Henry T., Geol. & Pet. Engr., 621 D St., San Bernardino, Cal.	'09
Bedford, Robert H., Min. Engr., Grass Valley, Cal.	'12
Bedworth, H. A., Met., American Brass Co., Waterbury, Conn.	'25
†Beeche, George Augustus, Act. Supt., Anglo-Chilean Consolidated Nitrate Corp., Min. Dept., Coya Division, Tocopilla, Chile.	'25
Beecher, Charles E., Chief Production Engr., Empire Gas & Fuel Co., Bartlesville, Okla.	'26
†Beeckel, Hermann C., 531 E. 4th St., Northampton, Pa.	'22
Beeman, Charles H., 112 E. 4th St., Lansdale, Pa.	'27
Beers, Albert D., Gen'l Mgr., Ore & Fuel Dept., The New Jersey Zinc Co., 160 Front St., New York, N. Y.	'13
Beeson, Alexander C., Worthington, W. Va.	'14
Beeson, J. J., Min. Geol., Scott Bldg., Salt Lake City, Utah.	'15
Beeth, Donald, New Mexico State Highway Dept., 910 Tilden St., Las Vegas, N. M.	'24
Behnke, Arno, Box 1348, Fort Worth, Tex.	'27
†Behr, Hans-Albert, Met., American Cyanamid Co., Linden, N. J.	'28
Behr, Hans C., Cons. Mech. Engr., 10 Overhill Rd., Scarsdale, N. Y.	'00
Behre, Charles H., Jr., Asst. Prof. of Economic Geol., Dept. of Geol., Univ. of Cincinnati Cincinnati, Ohio.	'23
†Behre, Henry A., Asst. Prof. of Min., Yale Univ., Hammond Lab., New Haven, Conn.	'26
Beissinger, Victor Justin, Pet. Engr., Pacific Western Oil Co., Box 483, Coalinga, Cal.	'21
Belchic, George, V.P., Belchic & Laskey, Inc., Box 1010, Shreveport, La.	'21
Beliaeff, Sergius S., Met. Engr., 51 Marcy St., Bloomfield, N. J.	'21
Bell, A. H., Chief Production Engr., Marland Oil Co. of California 417 S. Hill St., Los Angeles, Cal.	'28
Bell, Charles N., Stonehenge, Golden, Colo.	'09
Bell, H. Lewis, Chief Engr., The Overfold Co., Cleveland, Ohio.	'20
Bell, Harold S., Cons. Pet. Engr., 1384 Woolworth Bldg., New York, N. Y.	'24
Bell, Hugh, Ironmaster, Mount Grace Priory, Northallerton, England.	'07
†Bell, J. G., Central Alloy Steel Corp., 230 Park Ave., New York, N. Y.	'23
Bell, J. Mackintosh, Geol., Atlas Exploration Co., Ltd., Ottawa Electric Bldg., Ottawa, Ont., Canada.	'02
Bell, John W., Asst. Prof., Min. Engrg., McGill Univ., Montreal, Que., Canada.	'99
Bell, Leo R., Casilla 331, La Paz, Bolivia.	'17
Bell, Oliver Grogan, Div. Geol., Humble Oil & Refin. Co., Room 509, Sames-Moore Bldg., Laredo, Tex.	'21
Bell, Robert N., Min. Engr. & Geol., Box 1339, Boise, Idaho.	'04
Bellamy, Ben C., Civ. Engr., Bellamy & Sons, Box 438, Laramie, Wyo.	'24
Bellanger, A. J., Gen'l Mgr., Cie. du Boleo, 58 rue de Provence, Paris 9 <sup>e</sup> , France.	'27
Bellinger, H. C., V.P., Chile Exploration Co., 25 Broadway, New York, N. Y.	'91
Bellinger, H. P., 234 Fountain St., New Haven, Conn.	'89
**Bellport, Bernard P., St. Joseph Lead Co., Hughesville, Mont.	'29
Bellwald, J. N., Engr., Apt. 1488, Mexico City, D. F., Mexico.	'16
Belon, Enrique Torres, Sociedad de Ingenieros del Peru, Box 1314, Lima, Peru.	'22
Belugou, Andre, Gen'l Mgr., Société Minière et Metallurgique De Penarroya, 12 Place Vendôme, Paris, France.	'29
Bemis, Edwin L., Chief Engr., Wisconsin Steel Co., Hibbing, Minn.	'20
Bemis, H. Dean, Mill Supt., Pecos Mill, American Metal Co. of New Mexico, Glorieta, N. M.	'27
Benard, Frederic, Ontario Refin. Co., Ltd., Copper Cliff, Ont., Canada.	'29
Benard, Jan L., Production Supt., The Burmah Oil Co., Ltd., Chauk, Burma, India.	'29
Benbow, B. L., Mgr., Cleveland Wire Division, National Lamp Works, General Electric Co., 1770 E. 45th St., Cleveland, Ohio.	'19
Bench, Alfred R., Box 22, North Freedom, Wis.	'22
Bendelari, Arthur E., Pres., The Eagle Picher Lead Co., 134 N. LaSalle St., Chicago, Ill.	'17
Bender, Louis V., Gen'l Supt., Anaconda Reduction Works, Anaconda Copper Min. Co., Anaconda, Mont.	'13
Benedict, C. Harry, Met., Calumet & Hecla Cons. Copper Co., Lake Linden, Mich.	'15
†Benedict, P. C., Field Geol., United Verde Copper Co., Jerome, Ariz.	'27
Benedict, W. de L., Cons. Min. Engr., 1 W. 54th St., New York, N. Y.	'83
Bengtson, Erik, Min. Engr., Klarabergsgatan 54, Stockholm, Sweden.	'24
Benjamin, E. H., Min. Engr., Mariposa Commercial & Min. Co., 308 Finance Bldg., 580 Market St., San Francisco, Cal.	'99

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Benjamin, George T., Engrg. Dept., General Pet. Corp.	Vernon, Cal.	'25
Benner, Raymond C., The Carborundum Co.	Niagara Falls, N. Y.	'21
Bennett, A. F.	Tres Cruces, F.C.C.N.A., Prov. Jujuy, Argentina.	'12
Bennett, Clyde Mortimer, Mgr., Crude Oil Dept., Vacuum Oil Co., Esperson Bldg., Houston, Tex.		'20
Bennett, E. O., Chief Engr., Marland Cos.	Ponca City, Okla.	'27
Bennett, George Nelson, V.P. & Gen'l Mgr., Blue Bird Cons. Min. Co., 49 E. Broadway, Butte, Mont.		'17
Bennett, L. B., Engr., Stevens & Wood, Inc.	Youngstown, Ohio.	'22
Bennett, Russell H.	1601 Foshay Tower, Minneapolis, Minn.	'21
+Bennett, Russell M.	1601 Foshay Tower, Minneapolis, Minn.	'95
Bennett, Thomas H., Chief Engr., Matthiessen & Hegeler Zinc Co.	LaSalle, Ill.	'26
Bennetts, Albert Thomas, Government Mines Office.	Tapah, Perak, F.M.S.	'23
Bennetts, Benjamin H., Met. Engr., Bennetts' Chem. Lab., 1131 Market St., Tacoma, Wash.		'20
Bennie, J. W., Instructed to hold everything.		'17
Benoist, E. Juan.	Casilla 341, Vina del Mar, Chile.	'18
+Benscoter, Daniel B., Sales Engr. & District Sales Mgr., Sanford Day Iron Wks., Inc.	Knoxville, Tenn.	'26
+Benson, Harold J., Tutor, Geol. Dept., College of the City of New York, 140th St. & Convent Ave., New York, N. Y.		'28
Bensusan, Arthur J., West African Diamond Syndicate, Ltd., Box 52, Accra, Gold Coast Colony, W. Africa.		'19
+Bensusan, Kilian E., Civil & Min. Engr., Chicago Pneumatic Tool Co., 6 E. 44th St., New York, N. Y.		'27
Bent, Quincy, V.P., Bethlehem Steel Co.	Bethlehem, Pa.	'12
+Bentin M., Ricardo.	Pacae 984, Lima, Peru.	'23
Bentley, Charles, Analytical & Experimental Wk., South Dakota Mine Experiment Sta. South Dakota State School of Mines, Rapid City, So. Dak.		'17
Bentley, Robert.	1005 First National Bank Bldg., Youngstown, Ohio.	'84
Benton, Louis B., Geol. & Engr., Meredith & Benton, 10-12-14 Mancill Bldg., Box 536, Cisco, Tex.		'19
Bereslavsky, Euphime V., Cons. Engr.	1075 Park Ave., New York, N. Y.	'24
Berg, H. A.	Address Wanted.	'09
Berger, W. F. B., Min. Engr.	1449 Graybar Bldg., New York, N. Y.	'07
+Bergman, Raoul G. G., Compania Minera Aguilar, Tres Cruces, F.C.C.N.A., Prov. Jujuy, Argentina.		'24
Bergstrom, Frank S., Min. Engr., Gen'l Supt., Pitt Iron Min. Co., Mountain Iron, Minn.		'19
Berkefeld, Paul C., Min. Engr.	2701 Regent St., Berkeley, Cal.	'17
Berkey, Charles P., Prof. of Geol., Columbia Univ.	New York, N. Y.	'08
Bernard, Clinton P., Cons. Engr., General Dev. Co.	61 Broadway, New York, N. Y.	'16
Bernard, Harold B., V.P., Sinclair Oil & Gas Co., Sinclair Bldg.	Tulsa, Okla.	'28
Bernard, W. E., Geol., Gypsy Oil Co.	Box 2044, Tulsa, Okla.	'21
Bernoulli, Walter.	77 Steinengraben, Basle, Switzerland.	'23
+Berray, Tom, Min. Engr.	1830 1/2 N. Berendo, Los Angeles, Cal.	'28
Berrien, Chauncey L., Gen'l Supt. of Mines, Anaconda Copper Min. Co., Box 1375, Butte, Mont.		'13
Berry, Edwin S., Cons. Min. Engr., Yeatman & Berry, Room 1604, 165 Broadway, New York, N. Y.		'07
Berry, Eric C., Asst. Refinery Supt., Burmah Corp., Ltd., Namtu, N.S.S., Burma, India.		'28
Berry, George M., Lecturer on Met., College of Applied Science, Syracuse Univ., Syracuse, N. Y.		'19
Berry, Gibson, Supt., Park Premier & Park Nelson Min. Co.	Heber City, Utah.	'23
+Berry, J. Howard, Student, Oregon State College.	58 N. 26th St., Corvallis, Ore.	'29
Berry, John F., Cons. Mech. Engr., Hazeldene, Heugh Road, Walmer, Port Elizabeth, S. Africa.		'93
+Berry, William J., Jr. Scientist, Bureau of Standards, 18 Seaton Pl., N. W., Washington, D. C.		'24
Berteling, John F., Supt., Palms-Anvil-Keweenaw Mines, The Youngstown Sheet & Tube Co., Anvil Mine, Bessemer, Mich.		'20
Berthier, U. H., Engr., Ref. Supt., Cia. Minera de Penoles, S. A., Apt. 251, Monterrey, N. L., Mexico.		'16
Berton, Adrien, Ingenieur des Arts et Manufactures, Gen'l Mgr., The Corocoro United Copper Mines, Ltd., Corocoro, Bolivia.		'18
+Bessor, Phil S., Research Dept., Anaconda Copper Min. Co.	Anaconda, Mont.	'27
+Bethge, Harold W., Engr., Board of Transportation, Track Div., 105 Lafayette St., New York, N. Y.		'25
Bettles, Gordon M., Cons. Engr.	Nevada City, Cal.	'20
Betts, Anson G.	West Cummington, Mass.	'01
Betts, Robert M., Pres. & Mgr., Quicksilver Syndicate & Cornucopia Mines Co., Blackbutte, Ore.		'15



Bevan, John G., Met., Guggenheim Bros., Research Labs., 202nd St. & 10th Ave., New York, N. Y.	'27
Bevan, Laurence W., Gen'l Mgr., Hazard Wire Rope Co., 81 E. Ross St., Wilkes-Barre, Pa.	'22
Beyer, Charles E., 807 Rexford Dr., Beverly Hills, Cal.	'27
Beyer, Daniel C., 214 N. 8th Ave., Mt. Vernon, N. Y.	'19
Beyer, S. W., Min. Engr., Iowa State College, Ames, Iowa.	'98
Bickell, J. P., Pres., McIntyre Porcupine Mines, Ltd., 602 Standard Bank Bldg., Toronto, Ont., Canada.	'23
Biddison, P. McD., Cons. Engr., Southern Natural Gas Corp., Watts Bldg., Birmingham, Ala.	'16
Bierbaum, Christopher H., V.P. & Cons. Engr., Lumen Bearing Co., 197 Lathrop St., Buffalo, N. Y.	'19
Bierce, Ernest C., Western Clay & Metals Co., 576 Chamber of Commerce Bldg., Los Angeles, Cal.	'19
Bierman, Alfred C., Geol. & Engr., 1208 Dallas National Bank Bldg., Dallas, Tex.	'17
†Biermann, Josephus Georgius Antonius, Asst. to Tech. Dir., Astra Romana, Campina, Romania.	'26
Biesel, Charles, 2521 Riverside Dr., Houston, Tex.	'20
Biggett, Florence Cotter, Jr., Mech. Engr., Pres., United Engineering & Foundry Co., Farmers Bank Bldg., Pittsburgh, Pa.	'21
†Bignell, L. G. E., Pet. Engrg. Editor, Oil & Gas Journal, Tulsa, Okla.	'27
Bihlman, Victor W., Met. Engr., Wheeling Steel Corp., Suite 405, Wheeling Steel Corp. Bldg., Wheeling, W. Va.	'20
Bilheimer, Earl L., Mine Captain, St. Joseph Lead Co., Bonne Terre, Mo.	'22
Billick, Don Carlos, Caribbean Petroleum Co., Maracaibo, Venezuela.	'16
Billings, T. P., Min. Engr., 404 Dooly Block, Salt Lake City, Utah.	'15
Billingsley, Paul, Min. & Cons. Geol., Anaconda Copper Min. Co., International Smelt. Co. & Tintic Standard Min. Co., 1027 Continental Bank Bldg., Salt Lake City, Utah.	'13
Billow, E. E., Engr., Combustion, Pres., National Supply Co., 412 Orleans St., Chicago, Ill.	'16
Billwiller, C. J., Jr., Hacienda San Antonio, Chuquibambilla, Via Mollendo, Peru.	'17
Billyard, John R. H. H., Cons. Min. Engr., Casilla 866, Valparaiso, Chile.	'20
Bingham, R. A., 1645 Pennington Rd., Trenton, N. J.	'15
Binney, Ralph Loring, Met., The Binney Castings Co., 1801 Clinton St., Toledo, Ohio.	'21
Binsacca, William A., Met. Engr., Asst. Mill Supt., The Mexican Corp. S. A., Fresnillo, Zac., Mexico.	'21
Birch, G. Howard, Dan Creek Min. Co., Dan Creek, Alaska.	'16
Birch, Stephen, Min. Engr., Pres., Kennecott Copper Corp., 120 Broadway, New York, N. Y.	'06
Bird, Byron M., Supervising Engr., U. S. Bureau of Mines, Tuscaloosa, Ala.	'23
Bird, Elmer, 212 Glover Bldg., Little Rock, Ark.	'29
†Bird, J. W., Oil & Gas Producer, 2 Main St., Bradford, Pa.	'21
Bird, Robert Montgomery, Dist. Sales Mgr., The Midvale Co., 165 Broadway, New York, N. Y.	'05
Birkenstein, George, Mgr., Metal Dept., S. Birkenstein & Sons, in charge Research & Production, Globe Metal Co., 1030 W. North Ave., Chicago, Ill.	'29
Bischoff, Harry R., Min. Engr., Box 354, Haileybury, Ont., Canada.	'20
†Bishop, Eric C., Geol., Anglo-American Dev. Corp. of South Africa (Loangwa Conces- sions), Broken Hill, No. Rhodesia, Africa.	'27
Bishop, Lester F., Asst. Foreman, Anaconda Copper Min. Co., Emma Mine, Butte, Mont.	'22
Bishop, Roy N., Min. Engr., 411 Crocker Bldg., San Francisco, Cal.	'02
Bishop, Wheeler Scott, Dept. Chief, New Jersey Zinc Co., Palmerton, Pa.	'14
Bissell, Malcolm H., Geol., 7357 Franklin Ave., Los Angeles, Cal.	'21
Bitler, F. L., Cons. Min. Engr., Birkinbine Engrg. Offices, Commercial Trust Bldg., Philadelphia, Pa.	'16
Bitler, William F., Engr., Investigations & Appraisals, Provident Trust Co. of Philadelphia, S. E. Corner 17th & Chestnut Sts., Philadelphia, Pa.	'19
Bitner, William H., Met., Tainton Plant, Bunker Hill & Sullivan Min. & Smelt. Co., Kellogg, Idaho.	'28
Bittrich, Carl L., Bethlehem Steel Co., Bethlehem, Pa.	'27
Bitzer, Edmund C., Research Dept., The Youngstown Sheet & Tube Co., Youngstown, Ohio.	'28
Bjorge, Guy N., 807 Balfour Bldg., San Francisco, Cal.	'14
Black, Charles George, Min. Engr., Pittsburgh Coal Co., Preparation Dept., Pittsburgh, Pa.	'28
Black, Robert D., 4 Avon St., Cambridge, Mass.	'21
Black, Robert M., Prof. & Head, Dept. of Min., Univ. of Pittsburgh, Pittsburgh, Pa.	'09
Black, William, Mine Engr., American Zinc Co. of Tennessee, Mascot, Tenn.	'28
Blackburn, Alan R., 708 Chatham-Phenix Bldg., Long Island City, N. Y.	'21
Blackburn, Harry H., Min. Engr., Lewisburg, W. Va.	'07
Blackburn, W. H., Mgr., Nevada Mines, Treadwell Yukon Co., Ltd., 923 Crocker Bldg., San Francisco, Cal.	'06
BLACKETT, WILLIAM CUTHBERT, 12 South Bailey, Durham, England.	'21
Blackmar, Don C., Bohn Aluminum & Brass Corp., 7385 Jos. Campau, Detroit, Mich.	'26
Blackmer, W. D., Min. Engr., University Club, Los Angeles, Cal.	'07

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Blackwelder, Eliot, Prof. of Geol.	Box N, Stanford University, Cal.	'19
Blackwood, H., Cia. Minera Asarco, S. A.	Apt. 85, Parral, Chih., Mexico.	'28
Blades, Ernest O., Min. Engr.	3520 Jasmine Ave., Palms, Cal.	'22
Blair, Andrew A., Anal. Chem., Booth, Garrett & Blair, 406 Locust St., Philadelphia, Pa.		'75
Blair, Arthur E., Min. Engr., Asst. Gen'l Supt. of Mines, Anaconda Copper Min. Co.,	Box 1375, Butte, Mont.	'27
Blair, Charles S., Tennessee Coal, Iron & Railroad Co., Brown-Marx Bldg., Birmingham, Ala.		'28
Blake, Edwin T., V.P., Blake Bros. Co.	204 Balboa Bldg., San Francisco, Cal.	'03
Blake, Francis H., Min. Engr.	North St., Litchfield, Conn.	'03
†Blake, Henry E., American Cyanamid Co.	511 Fifth Ave., New York, N. Y.	'20
Blakemore, G. H., Min. Engr. & Met., No. 10 Office, First Floor, Union Bank Chambers,	68½ Pitt St., Sydney, N. S. W., Australia.	'97
Blakslee, S. Whitmore, Div. Supt., Pennsylvania Coal & Coke Corp.	Cresson, Pa.	'27
Blanchard, Roland, Mt. Isa Mines, Ltd.	67 York St., Sydney, Australia.	'21
Bland, Richard Louis, Chief Engr., Compañía Mexicana de Petroleo "Union" S. A.	Avenida Hidalgo Num. 1, Tampico, Tamps., Mex.	'29
Blanford, A. W., Min. Engr., c/o Señor J. Acquatella, New Goldfields of Venezuela, Ltd.,	Ciudad Bolivar, Venezuela.	'26
†Blatch, Francis H., Asst. Gen'l Mgr., Wilmot Engrg., Co.,	801 Markle Bank Bldg., Hazleton, Pa.	'22
Blaut, Samuel J., Pres., National Smelt. & Refin. Corp., 218 W. 40th St., New York, N. Y.		'26
Blauvelt, Warren Scott, V.P., Hudson Valley Coke & Products Corp.	Troy, N. Y.	'23
Blauvelt, William Hutton, Cons. Engr., Columbia Gas & Electric Corp.,	61 Broadway, New York, N. Y.	'87
Blaylock, Selwyn G., Min. & Met., Dir. & Gen'l Mgr., Cons. Min. & Smelt. Co. of Canada,	Ltd., Trail, B. C., Canada.	'18
Bleek, A. W. G., Geol., The London Rangoon Trading Co.,	Merchant St., Rangoon, Burma, India.	'10
†Bleeker, Edward S., Chief Geol., Venezuela Gulf Oil Co., Apt. 234, Maracaibo, Venezuela.		'21
Bleekman, John Eben, Pres., Cincinnati Union D Terminal Co.,	532 Singer Bldg., New York, N. Y.	'21
Bleiler, H. D., Colliery Engr., Olyphant Colliery, The Hudson Coal Co., Olyphant, Pa.		'20
†Blessing, Ernest, Jr. Min. Engr., Braden Copper Co.	Coya, Rancagua, Chile.	'26
†Blickenstaff, Earle B., Horn Silver Mine.	Milford, Utah.	'25
Blick, P. F., Min. Engr., Del. Member, Board of Directors, N. V. Hollandsche Metallurgische	Bedryven, Zwijgerlaan 76, The Hague, Holland.	'16
†Blinzler, Lee E.	Rio Guinobatam, Masbate, P. I.	'25
Blitz, Ralph S., Mgr., United States Vanadium Corp.	Rifle, Colo.	'26
Block, H. W. C.	1804 Warren St., St. Louis, Mo.	'86
†Block, Harold Hutchin, Research Engr., Aluminum Co. of America,	2800 Harvard Ave., Cleveland, Ohio.	'25
Blomfield, A. L.	Cheyenne, W. Va., Australia.	'05
Blomquist, Edwin Ragnar, Mngng. Dir., Hoganas-Billesholms Aktiebolag, Hoganas, Sweden.		'28
†Blonsky, George Basil, The Dorr Co.	247 Park Ave., New York, N. Y.	'27
Blood, George D., Min. Engr.	2016-17 Hunter-Duili Bldg., San Francisco, Cal.	'93
†Bloom, Carl V., Student, Univ. of California.	Berkeley, Cal.	'28
Blomfield, Edwin C., Min. Engr., Selection Trust, Ltd., Selection Trust Bldg.,	Mason's Ave., Coleman St., London, E.C.2, England.	'16
Blose, Stanley, Sales Mgr., Consolidated Coal & Coke Co.	421 Empire Bldg., Denver, Colo.	'21
Bloss, Richard R., V.P. & Gen'l Mgr., International Derrick & Equipment Co.,	875 Michigan Ave., Columbus, Ohio.	'29
†Blough, Arthur K., Asst. Supt., Lower Open Hearth, Bethlehem Steel Co., Johnstown, Pa.		'27
Blow, John J., Min. Engr., 12 Phoenix Pl., Mount Pleasant, London, W.C.1, England.		'04
Blum, E. H.	705 Magnolia Bldg., Dallas, Tex.	'17
Blyth, William B., Cons. Pet. Engr.,	8 Great Winchester St., London Wall, London, E.C.2, England.	'23
Boardman, John L., Chairman, Bureau of Safety, Anaconda Copper Min. Co.,	10 E. Quartz St., Butte, Mont.	'20
†Boatman, Harold R., Plant Met., Inland Steel Co.	East Chicago, Ind.	'27
†Bob, Charles V., Cons. Engr. & Pres., Comstock Merger Mines, Inc., & Engineer, Gold	Mines, Ltd., Inc., 120 Broadway, New York, N. Y.	'24
Bocking, Charles, Pres., The Granby Cons. Min. Smelt. & Power Co., Ltd.,	Box 1180, Vancouver, B. C., Canada.	'17
Bockus, Charles E., Pres., Clinchfield Coal Corp.	Dante, Va.	'27
Body, J. B.	Hindhead Court, Hindhead, Surrey, England.	'19
†Boeck, John W., Met., Lumen Bearing Co.	197 Lathrop St., Buffalo, N. Y.	'23
Boegehold, A. L., Met., General Motors Research Labs., General Motors Bldg., Detroit, Mich.		'26
†Boehmer, Robert, Jr., Mill Operator, Utah Copper Co.	Garfield, Utah.	'26
Boericke, Gideon, Pres., The Primos Co., Suite 1307-1310, Packard Bldg., Philadelphia, Pa.		'19
Boericke, Harold, Sec., The Primos Co., Suite 1307-1310, Packard Bldg., Philadelphia, Pa.		'14
Boericke, William F., Min. Engr.	29 W. 39th St., New York, N. Y.	'25

Boero, Carlos, Min. Engr., Cia. Minera Asarco, S. A.	Parral, Chih., Mexico.	'28
†Boggs, O. D.	Box 692, Cobourg, Ont., Canada.	'20
†Boggs, Robert L.	Apt. 234, Maracaibo, Venezuela.	'27
Boggs, W. B., Smelter Supt., Horne Copper Corp.	Noranda, Que., Canada.	'28
†Boghossian, A. G., Geol. & Engr.	Box 411, Cisco, Tex.	'22
†Bohart, Philip H., Chief Geol., Mexican Gulf Oil Co., Apt. 106, Tampico, Tamps., Mexico.		'19
†Bohlin, Howard Grenville, Instr., City College of New York,	140th St. & Convent Ave., New York, N. Y.	'22
Bohn, Charles A., Min. Engr., Amer. Smelt. & Ref. Co., 120 Broadway, New York, N. Y.		'93
Bohn, W. C., Min. Engr.	Rosiclare, Ill.	'19
Boise, Charles W., Selection Trust Bldg.,	Mason's Ave., Coleman St., London, E.C.2, England.	'14
Boise, David W., Cashier, Ray Cons. Copper Co., Chino Mines.	Hurley, N. M.	'17
Bole, G. A., Research Prof., Ceramic Engrg., Ohio State Exper. Sta., Lord Hall,	Ohio State Univ., Columbus, Ohio.	'27
†Bollman, Michael J., Student, Lehigh Univ.	Bethlehem, Pa.	'29
Bolton, John W., Met., The Lunkenheimer Co.	Cincinnati, Ohio.	'27
Bonardi, Jack P., Sales Mgr., Mine & Smelter Supply Co.	42 Broadway, New York, N. Y.	'24
†Bond, Reid W., Production Engr., Shell Pet. Corp.	Mayo Bldg., Tulsa, Okla.	'27
Bone, Albert J., Met. Engr., Gen'l Mgr., Manitoba Basin Min. Co., Ltd.,	The Pas, Man., Canada.	'08
†Bonebrake, D. S., International Smelt. Co.	Box 770, Tooele, Utah.	'25
Bonham, J. C., Construction, Ford Motor Co. of Canada, Ltd.	Ford City, Ont., Canada.	'21
Bonine, Chesleigh Arthur, Prof. of Geol., Head of Dept. Geol. & Min., School of Mines,	Pennsylvania State College, State College, Pa.	'21
Bonnemort, R. J., Min. Engr., Mine Foreman, St. Louis Smelt. & Refin. Co.	Rico, Colo.	'21
Bonnet, Frank H., Asst. Supt., The Buckeye Steel Castings Co.	Columbus, Ohio.	'20
Bonnyman, Alexander, Chairman of Board, Blue Diamond Coal Co.,	1102 Holston Bank Bldg., Knoxville, Tenn.	'27
Bonnyman, James, Pres., Blue Diamond Coal Co.,	707 Dixie Terminal Bldg., Cincinnati, Ohio.	'12
†Boomer, George O., V.P., Ewald Iron Co.	Louisville, Ky.	'29
†Boote, Ellwood Chamberlain, Student, Pennsylvania State College.	State College, Pa.	'26
Booth, A. E., Oil Producer.	Room 30, Auerhaim Bldg., Bradford, Pa.	'24
Booth, George H., Mech. Engr., Inspiration Cons. Copper Co.	Inspiration, Ariz.	'17
Booth, L. E., Charge, Ore Testing & Research Work, General Engineering Co.,	159 Pierpont Ave., Salt Lake City, Utah.	'17
Borcherdt, Walter O., Asst. Gen'l Mgr. of Mines, The New Jersey Zinc Co.,	160 Front St., New York, N. Y.	'14
Bordeaux, Albert F. J., Cons. Min. Engr.	Montfleury, Latrouche, Isère, France.	'04
Borden, Gideon S., New River & Pocahontas Cons. Coal Co.,	1100 Commercial Trust Bldg., Philadelphia, Pa.	'02
Borden, Granville S., Min. Engr. & Lawyer, Standard Oil Co. of California,	225 Bush St., San Francisco, Cal.	'25
Borden, S. P., Pet. Engr. & Geol.	721 Slattery Bldg., Shreveport, La.	'29
Borg, John, Executive Pres., Callahan Zinc-Lead Co.	61 Broadway, New York, N. Y.	'24
Borgeson, A. C., Min. Engr.	520 West Pine St., Chisholm, Minn.	'15
Bornstein, Hyman, Chief Chem. & Met., Deere & Co.	Moline, Ill.	'21
†Borrer, Charles D., Asst. Mine Supt., Canadian Johns Manville Co., Ltd.,	Asbestos, Que., Canada.	'26
Borton, George W., Pres. & Gen'l Mgr., Pennsylvania Crusher Co.,	Liberty Trust Bldg., Broad & Arch Sts., Philadelphia, Pa.	'22
†Bosch, Joseph M.	Lake Linden, Mich.	'19
†Bose, Santosh Kumar, Tatas' Jamadoba Colliery.	Jealgora P.O., Dist. Manbhum, India.	'24
†Bossler, Robert B., Penn Pet. Co.	Exchange National Bank Bldg., Olean, N. Y.	'22
Bostaph, Harvey P., Engr., The United Dev. Co.	Chatham, Ont., Canada.	'25
Bestwick, Fred H.	610 Denver National Bldg., Denver, Colo.	'09
Bosworth, Harold O., Pres., The Denver Fire Clay Co.,	Box 1107, 1744 Champa St., Denver, Colo.	'20
†Botero-Londono, Jaime.	Medellin, Colombia.	'25
Botsford, Clarence A.	Apt. 55, Chihuahua, Chih., Mexico.	'19
Botsford, F. P., Dist. Mgr., Pickands, Mather & Co.	Box 448, Hibbing, Minn.	'17
Botsford, George B., Supt., Orient Iron Mine & The Wagon Wheel Gap Flourspar Mine,	Colorado Fuel & Iron Co., Mineral Hot Springs, Colo.	'18
Botsford, Robert S., Min. Engr., Fraser Brace, Ltd. of Montreal.	Medellin, Colombia.	'05
†Boucek, Albert C., Chem. Engr., The Selden Co.	McCartney Ave., Pittsburgh, Pa.	'27
Boucher, L. James, Asst. Plant Mgr., The Atlas Portland Cement Co.	Northampton, Pa.	'29
Boughton, Charles W., Pet. Geol., London-Pacific Petroleum Co., Ltd.,	Negritos Talara, Peru.	'24
Bourhenne, G. H., Minas del Tajo.	Rosario, Sin., Mexico.	'29
Bourlier, Walter S., Chief Engr. of Mines, Bethlehem Steel Corp.	Bethlehem, Pa.	'23

For explanation of symbols, see page 5.

†Bourne, Austin H., Jr. Met. Engr....	43 Third St., St. Lambert, Co. Chambly, Que., Canada.	'27
†Bourne, Henry K., V.P., Oglebay Norton & Co.....	1208 Hanna Bldg., Cleveland, Ohio.	'24
Bousquet, L'Roche George, Chem. Engr., Titanium Pigment Co., Inc., River des Peres & Iron Mountain Tracks, St. Louis, Mo.		'20
Boutwell, John M., Min. Geol.....	Continental National Bank, Salt Lake City, Utah.	'04
Bowden, James J., Chief Met., Republic Iron & Steel Co.....	Warren, Ohio.	'25
†Bowditch, Richard L., Engr., C. H. Sprague & Son Co., 10 Post Office Square, Boston, Mass.		'25
Bowen, C. F., Chief Geol., Standard Oil Co. of N. J., Room 1560, 26 Broadway, New York, N. Y.		'20
Bowen, H. P.....	808 World Bldg., Tulsa, Okla.	'04
Bower, Clyde W., Grasselli Chemical Co.....	East Chicago, Ind.	'21
Bowers, J. Alden.....	2000 E. 48 So., Murray, Utah.	'25
Bowie, Clifford P., Pet. Engr., Supervising Engr. in Charge, U. S. Bureau of Mines, 506 Custom House, San Francisco, Cal.		'28
Bowles, Oliver, Chief, Building Materials Section, Bureau of Mines.....	Washington, D. C.	'14
Bowles, Ross.....	802 Spivey Bldg., East St. Louis, Ill.	'15
Bowman, Charles H., Div. of Constr. & Engrg., Stone & Webster, Inc., 120 Broadway, New York, N. Y.		'06
Bowman, R. G., Asst. Supt., International Lead Refin. Co.; Anaconda Lead Products Co., East Chicago, Ind.		'15
Bowman, W. F., Cons. Geol., Bowman & Vetter..	Second National Bank Bldg., Houston, Tex.	'21
Bowron, Richard L., Supt., Open Hearth Furnaces, Tennessee Coal, Iron & R.R. Co., Ensley, Ala.		'27
Box, I. L., Chief Engr., Consolidated Lead & Zinc Co.....	Picher, Okla.	'21
Boyd, Adam Alexander, Mount Morgan Ltd.....	Mount Morgan, Queensland, Australia.	'09
Boyd, Daniel.....	Apt. 2, 295 Maplewood Ave., Outremont, Que., Canada.	'16
Boyd, G. M., Nicolet Asbestos Mines Ltd.....	Danville, Que., Canada.	'21
Boyd, Harold E., Pet. Geol., Henry L. Doherty & Co., Room 1201, 60 Wall St., New York, N. Y.		'20
Boyd, J. T., Min. Engr., Mgr., Teziutlan Unit, The Mexican Corp., S. A., Aire Libre, Pue., Mexico.		'14
†Boyd, James, Student, Colorado School of Mines.....	A.T.O. House, Golden, Colo.	'28
Boyd, Julian, Cons. Min. Engr., Pacific Coast Borax Co., 1014 Central Bldg., Los Angeles, Cal.		'05
Boyd, Robert R., Production Engr., Richfield Oil Co. of California, 11th Floor, A. G. Bartlett Bldg., Los Angeles, Cal.		'16
Boyd, W. Baxter, Geol., Asst. to William H. Atkinson, 701 Continental Bldg., Oklahoma City, Okla.		'28
Boyd, W. S., Min. Engr., Asst. Managing Dir., Nevada Cons. Copper Co., 1800 Hobart Bldg., San Francisco, Cal.		'02
Boydell, H. C., Cons. Min. Engr. & Geol....	310-11 McKinnon Bldg., Toronto, Ont., Canada.	'15
Boydell, W. G. Broughton, c/o Miss C. E. Arnold, 53 Bay Rd., North Sydney, N.S.W., Australia.		'19
Boyer, Walton T., Met. Engr.....	Tucson, Ariz.	'25
Boyle, Albert Clarence, Jr., Chief Geol., Union Pacific Railway System, 305 Custer St., Laramie, Wyo.		'13
Boyle, D. L., Supt. of Mines, Penelec Coal Corp.....	Drawer G, Johnstown, Pa.	'25
Boyle, Harry, Min. Engr., Northwestern Improvement Co.....	Roslyn, Wash.	'13
Boyle, W. H., Tennessee Copper Co.....	Copperhill, Tenn.	'29
†Boyles, Russell C., Teacher, Physics & Chem., Reading School Board, Boys' High School, 8th & Washington Sts., Reading, Pa.		'17
Boylston, Herbert M., Prof. of Met., Charge, Min. Engrg. Dept., Case School of Applied Science, Cleveland, Ohio.		'12
Boynton, Arthur J., Cons. Engr., V.P., H. A. Brassert & Co., 310 South Michigan Ave., Chicago, Ill.		'04
Boynton, H. C., Met., John A. Roebling's Sons Co.....	Trenton, N. J.	'01
Boza, Hector J., Cons. Engr., Boza Aizcorbe Hermanos.....	Box 106, Lima, Peru.	'19
Brackett, F. Ernest, Min. Engr.....	Cumberland, Md.	'26
Bradbury, Charles Leighton, Min. Engr., Mgr., Empresa Minera Huanuni, c/o Simon I. Patino, Huannuni, Bolivia.		'20
Bradbury, F. Dewet, Min. Engr., South American Gold & Platinum Co., Andagoya, Colombia.		'28
Braden, Spruille, Min. Engr., Suite 1809-13, Washington Life Bldg., 141 Broadway, New York, N. Y.		'17
Braden, William, Min. Engr.....	141 Broadway, New York, N. Y.	'94
Bradfield, Thomas Palmer.....	Box 1231, Rivermines, Mo.	'21
Bradford, Leslie, Mgr., Broken Hill Proprietary Co., Ltd., Iron & Steel Wks., Newcastle, N.S.W., Australia.		'27
Bradford, Seymour K.....	Address Wanted.	'02



†Bradley, Clarence I.	.....	Branford, Conn.	'13
Bradley, Frederick W., Min. Engr., Pres., Bunker Hill & Sullivan M. & C. Co.,			
	Crocker Bldg., San Francisco, Cal.	'91	
Bradley, George O., Mech. Engr.	.....	530 Crofton Ave., Oakland, Cal.	'16
Bradley, J. G., Coal Operator, Pres., Elk River Coal & Lumber Co.	.....	Dundon, W. Va.	'19
†Bradley, J. W., United Eastern Mines Corp.	.....	1219 Pacific Mutual Bldg., Los Angeles, Cal.	'23
**Bradley, James, Supt., Spanish Mine.	.....	Washington, Nevada Co., Cal.	'29
Bradley, John C., Met., The American Brass Co.	.....	Waterbury, Conn.	'18
Bradley, Linn, Chem. Engr., V.P. & Sec., Bradley-McKeefe Corp.,			
	Room 818, 522 Fifth Ave., New York, N. Y.	'15	
Bradley, O. U., Min. Engr., Geol., U. S. Oil & Gas Inspect., Dept. of Interior,			
	Room 410, Federal Bldg., Muskogee, Okla.	'06	
Bradley, P. R., Cons. Engr., Alaska Juneau Gold Min. Co.,			
	1022 Crocker Bldg., San Francisco, Cal.	'02	
Bradley, Walter W., State Mineralogist of California, State Div. of Mines & Min.,			
	Ferry Bldg., San Francisco, Cal.	'29	
Bradley, William H., Retired.	.....	570 N. Kenmore Ave., Los Angeles, Cal.	'28
†Bradley, William M., Counsellor.	.....	c/o H. F. Bradley, Box 274, Park City, Utah.	'15
*†Bradley, Worthen, Jr., Mgr., Sulphur Bank Syndicate.	.....	Clear Lake, Lake Co., Cal.	'29
Bradshaw, Frederick, Min. Engr., Gen'l Mgr., Tonopah Development Co.	.....	Tonopah, Nev.	'02
Brady, Samuel D., Jr., Supt., Osage Mines, Brady Warner Coal Corp.,			
	Box 716, Morgantown, W. Va.	'28	
Bragg, G. A., Koppers Co.	.....	Union Trust Bldg., Pittsburgh, Pa.	'19
Braid, Arthur F., Sales Mgr. & Met. Engr., Metal & Thermit Corp.,			
	120 Broadway, New York, N. Y.	'20	
Brain, Elmer C., Mgr., United Development Co.	.....	Humble, Tex.	'18
Brainerd, Howard Stanford, Met., Ingersoll-Rand Co.	.....	Phillipsburg, N. J.	'15
Brainin, Clement S., Pres., Interstate Products Corp.	.....	27 Commercial St., Newark, N. J.	'26
Braly, N. B., Min. Engr.	.....	325 Pacific Southwest Bank Bldg., Pasadena, Cal.	'06
Brandenburger, Walter O., Min. Engr., Southern Coal Coke & Min. Co.,			
	First & Main St., Belleville, Ill.	'27	
Brandenthaler, R. R., Pet. Engr., U. S. Bureau of Mines.	.....	Bartlesville, Okla.	'27
†Brander, James, Electrical Engr.	.....	62 Haverstock Rd., Knowle, Bristol, England.	'20
†Brandon, Ford C., Union Drawn Steel Co.	.....	Beaver Falls, Pa.	'27
Brandon, Milton F., Supt. of Mines, Graceton Coal & Coke Co.	.....	Graceton, Indiana Co., Pa.	'21
Branner, George C., State Geol., State of Arkansas.	.....	447 State Capitol, Little Rock, Ark.	'25
Brassert, H. A., Pres., H. A. Brassert & Co.	.....	310 So. Michigan Ave., Chicago, Ill.	'99
†Bratescu, C., Electro-Mechanical Engr., Roumanian Geol. Survey,			
	Str. Bogdan Voda 10, Bucharest 2, Romania.	'29	
†Brauchli, Rud. W., Geol., Anderson-Prichard Oil Corp., Colcord Bldg., Oklahoma City, Okla.			'24
Bravo, Jose J., Director, Cuerpo de Ingenieros de Minas y Aguas.	.....	Lima, Peru.	'20
†Bray, Alton Charles, Newfoundland Min. Corp., Ltd.	.....	Badger Brook, Newfoundland.	'29
Bray, John L.	.....	42 St. Stephen St., Boston, Mass.	'23
Bray, Thomas Joseph, Retired.	.....	1510 Fifth Ave., Youngstown, Ohio.	'19
Brayer, N. G., Supt., Sharon Works, The National Malleable & Steel Castings Co.,			
	Sharon, Pa.	'10	
Brayton, Corey C., Min. Engr., Sales Engr., American Manganese Steel Co.,			
	Oakland Pier, Substation, Oakland, Cal.	'08	
Breckinridge, George Castleman.	.....	1634 Fargo Ave., Chicago, Ill.	'24
Breckon, L. S., Underground Foreman, Utah Copper Co.	.....	Kearns Bldg., Salt Lake City, Utah.	'29
Bregman, Adolph, Mngng. Editor, <i>The Metal Industry; Brass World</i> ,			
	99 John St., New York, N. Y.	'21	
Bregy, Louis H., Min. Engr., Drexel & Co.	.....	15th & Walnut Sts., Philadelphia, Pa.	'25
Breitenstein, August J., The Valley Camp Coal Co.	.....	Riley Law Bldg., Wheeling, W. Va.	'26
Breitung, Charles A.	.....	Box 478, Ada, Okla.	'20
Bremer, Edwin, Met. Editor, <i>The Foundry</i> .	.....	Penton Bldg., Cleveland, Ohio.	'25
Bremmer, F. W., Met., Standard Seamless Tube Co.	.....	Ambridge, Pa.	'24
†Bregman, A. J., Min. Engr., Standard Oil Co. of California.	.....	2029 Arthur St., Fresno, Cal.	'25
Brennan, William David, Mgr., Stag Canyon Branch, Phelps Dodge Corp., Dawson, N. M.			'14
Brennon, John C.	.....	120 Broadway, New York, N. Y.	'21
†Breton, Ernest J., Gen'l Mine Foreman, Anglo-Chilean Cons. Nitrate Co.,			
	Maria Elena, Chile, Via Tocopilla.	'20	
Bretschneider, H. C., V.P., Midwest Refin. Co.	.....	Box 240, Denver, Colo.	'25
Brett, A. J., Cons. Engr., Central Mining & Investment Corp., Ltd.,			
	1 London Wall Bldgs., London Wall, London, E. C. 2, England.	'02	
Brewer, Arthur K., Met.	.....	91 Commonwealth Ave., San Francisco, Cal.	'97
Brewer, Carl, Asst. Supt., The Cleveland-Cliffs Iron Co.	.....	Negaunee, Mich.	'08
Brewer, W. F., Engr., Roxana Petroleum Corp.	.....	Tulsa, Okla.	'21
Brewer, William M., Cons. Min. Engr., Brewer & Peterson,			
	936 Courtney St., Victoria, B. C., Canada.	'93	

For explanation of symbols, see page 5.



Brewster, Burt B., Intermountain Mgr., Sullivan Machinery Co., 117 West 2nd So., Salt Lake City, Utah.	'29
Brewster, Frank M., Oil & Gas Production, Gen'l Mgr., Belmont Quadrangle Drilling Corp., Draw 373, Bradford, Pa.	'28
Brewster, Thomas T., Pres., Mt. Olive & Staunton Coal Co., 1012 Federal Commerce Trust Bldg., St. Louis, Mo.	'16
Breyer, Frank G., Cons. Engr. & Met., Singmaster & Breyer, Graybar Bldg., Room 1640, 420 Lexington Ave., New York, N. Y.	'16
Bridge, John M., Gen'l Supt., Yallourn Works, State Electricity Commission of Victoria, Yallourn, Vic., Australia.	'25
Bridge, Samuel Davenport, Min. ....	109 West Agarita Ave., San Antonio, Tex. '01
Bridgman, G. T., Cons. Min. Engr., Guggenheim Bros. ....	120 Broadway, New York, N. Y. '17
Bridle, Arthur. ....	Box 2285, Manila, P. I. '21
Briggs, Charles H., Draftsman, St. Joseph Lead Co. ....	Bonne Terre, Mo. '16
Briggs, Charles Willers, Met., Pacatome Co. ....	Bradley, Cal. '26
Briggs, Walter M., Pres., Regal Mines of Alaska. ....	Pleasanton, Alameda Co., Cal. '29
Bright, Graham, Sales Engr., Mine Safety Appliances Co., Braddock Ave. & Thomas Blvd., Pittsburgh, Pa.	'15
†Bright, Richard T., Val. Engr. ....	405 Bliss Bldg., Tulsa, Okla. '28
Brignon, Russell Edward, Student, Lawrence College. ....	Appleton, Wis. '26
Brinkerhoff, Charles M., Inspiration Cons. Copper Co. ....	Inspiration, Ariz. '24
Brinker, Arthur C., Cons. Min. Engr., Bolivian Tin Mines Co., S. A., Suite 1636, 120 Broadway, New York, N. Y.	'01
Brinsmade, Robert B., Cons. Engr. ....	Av. Legislativa 40, Mexico City, D. F., Mexico. '99
Briscoe, Glenn O., Pet. Geol., Cottingham & Briscoe, Cons. Geols., Box 474, San Angelo, Tex.	'27
Britt, Richard H. ....	320 Main St., Rockland, Me. '98
Britton, Sam A., Sales Engr., Gardner Denver Co. ....	523 State St., Knoxville, Tenn. '26
Broadley, Joseph Richard, Mech. Engr., Specialist in Ore Dressing Machinery, Broadley Engrg. Co., Broadstreet House, Old Broad St., London, E.C. 2, England.	'28
†Brobeil, Frank J., Civil Engr., The Foundation Co. ....	120 Liberty St., New York, N. Y. '23
Brock, R. W., Dean, Faculty of Applied Science, Univ. of British Columbia, Vancouver, B. C., Canada.	'04
Broderick, Thomas M., Chief Geol., Calumet & Hecla Cons. Copper Co. ....	Calumet, Mich. '20
Brodie, Walter M., Min. & Met. Engr. ....	1807 Phelps Place, Washington, D. C. '72
Brokaw, Albert D., Geol., Brokaw, Dixon, Garner & McKee, 120 Broadway, New York, N. Y.	'15
Bronson, Edmond B., Pres., Bagdad Copper Corp. ....	111 Broadway, New York, N. Y. '17
†Bronson, Edwin H., Underground Dept., Detroit Edison Co. ....	Detroit, Mich. '24
†Bronson, H. Howard, Met., Bethlehem Steel Co., Cambria Plant. ....	Johnstown, Pa. '29
Brookby, Harry E., Dev. Engr., U. S. Gypsum Co. ....	300 W. Adams St., Chicago, Ill. '28
†Brooke, J. K., Shift Boss, American Smelt. & Refin. Co., Mina Tiro General, Charcas, S.L.P., Mexico.	'24
Brooks, Earl W., Oil Geol. & Oil Producer. ....	Box 515, Pecos, Tex. '18
Brooks, George S., Met. Engr., Pres., Executive Committee, Giesche Spolka Akcyjna, Katowice, Poland.	'08
Brooks, H. O., Supt., Rocky Mountain Mines Co. ....	Box 338, Albuquerque, N. M. '08
Brooks, John M., Jr., Mgr., Cia. Minera Erupcion y Anexas, S. A. & Cia. Minera de Plomo, S. A., Los Lamentos, Chih., Mexico.	'04
Brooks, John Y., Mgr., Fanner Mfg. Co. ....	12037 Lake Ave., Cleveland, Ohio. '12
Brooks, Lyman H., Jr., Min. Engr., Mgr., Irma Mines. ....	Cooke City, Mont. '21
Brooks, Raymond, Cons. Min. Engr. ....	15 William St., New York, N. Y. '19
Brophy, James F., Min. Engr. ....	Red Lodge, Mont. '01
†Brophy, R. C., Min. Engr., St. Joseph Lead Co. ....	Rivermines, Mo. '26
Brosky, Alphonse F., Assoc. Editor, <i>Coal Age</i> , McGraw-Hill Publishing Co., Inc., 10th Ave. & 36th St., New York, N. Y.	'27
Brossard, Eugene E., Geol., Venezuela Gulf Oil Co., Apt. 35, Ciudad Bolivar, Venezuela.	'29
Broué, Albert Edward, Herald Bldgs., 66 Pitt St., Box 1753, J.J., G.P.O., Sydney, N.S.W., Australia.	'26
†Brousseau, Andre Ringgold, Engr., Texas Gulf Sulphur Co. ....	Newgulf, Tex. '20
Brown, A. T., Cons. Min. Engr., Australian Inst. of M. & M., 370 Little Collins St., Melbourne, Vic., Australia.	'91
Brown, Albert L., Engrg. Staff, Wallaroo-Mt. Lyell Fertilisers, Ltd., Wallaroo, South Australia.	'11
Brown, Charles H., Pres. & Mgr., Brown Tool Co., Inc. ....	Box 127, Breckenridge, Tex. '23
Brown, Charles M., Mgr., Carolina-Georgia Service Co. ....	Box 0, Belton, S. C. '29
Brown, Charles Wilson, Geol., Assoc. Prof. of Geol. & Head, Geol. Dept., Brown Univ., Providence, R. I.	'20
†Brown, Davenport, Min. Engr., Trustee. ....	185 Summer St., Boston, Mass. '02
Brown, David R. C., Mining. ....	Aspen, Colo. '09
Brown, Dickson Q., Pet. ....	342 Madison Ave., New York, N. Y. '14

## 22 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Brown, Donald C.	82 Beaver St., New York, N. Y.	'01
Brown, E. I., Min. Engr., Cia. Minera Choco-Pacifico,	Andagoya, Colombia, via Buenaventura.	'21
Brown, E. O. Forster, Min. Engr.,	706-7 Salisbury House, Finsbury Circus, London, E.C. 2, England.	'16
Brown, Edmund G.	164 Webster St., Malden, Mass.	'19
Brown, Edward W., Pres., Sterling Salt Co.	29 Broadway, New York, N. Y.	'06
Brown, Eldon L., Gen'l Supt., Sherritt Gordon Mines, Ltd.	The Pas, Man., Canada.	'26
Brown, Elwin F., Sec. & Gen'l Mgr., Mineral Min. Co.,	First National Bank Bldg., Iron Mountain, Mich.	'91
+Brown, Eric H., First Aid Miner, U. S. Bureau of Mines.	Pittsburgh, Pa.	'28
Brown, George W., Min. Engr.	237 North Third St., Raton, N. M.	'27
Brown, H. J., Cons. Engr.	174 Valentine St., West Newton, Mass.	'12
Brown, H. L.	421 Continental Oil Bldg., Denver, Colo.	'07
Brown, Henry E., Jr., Student, Texas College of Mines.	El Paso, Tex.	'27
Brown, Henry Herbert, Texas Gulf Sulphur Co.	Newgulf, Tex.	'20
Brown, J. F. Kellock, Asst. to V.P., Hudson Coal Co.	Scranton, Pa.	'21
Brown, John Albert, General Pet. Corp. of California.	1003 Higgins Bldg., Los Angeles, Cal.	'20
Brown, John Briscoe, Pres., Rainbow Mines, Inc.	Terlingua, Tex.	'22
Brown, John S., Geol., St. Joseph Lead Co.	Room 1601, 250 Park Ave., New York, N. Y.	'23
Brown, John T., Jr., Supt., Duquesne Reduction Co.	Farmers Bank Bldg., Pittsburgh, Pa.	'07
Brown, Leroy T.	Huanuco, Peru.	'26
+Brown, N., Supt. No. 3 Mine, Bethlehem Mines Corp.,	Box 1, Cornwall, Lebanon County, Pa.	'20
+Brown, Prentice F., Pet. Geol., Fisher & Lowrie, Geol. & Pet. Engrs.,	Box 776, Midland, Tex.	'25
Brown, R. Gilman, Cons. Engr.,	Adelaide House, King William St., London, E.C. 4, England.	'89
Brown, R. H., Mgr., Ingersoll Rand Co. of Texas.	611 Magnolia Bldg., Dallas, Tex.	'17
Brown, Ralph D., Min. Engr.	Box 195, Harrisburg, Ill.	'15
Brown, Ralph E.	Box 643, Ray, Ariz.	'27
Brown, Richard F., Min. Engr., H. W. Gould & Co.	762 Mills Bldg., San Francisco, Cal.	'25
Brown, Richard P., Pres., The Brown Instrument Co.,	Wayne & Windrim Aves., Philadelphia, Pa.	'19
Brown, Robert Wesley, Geol., Producers & Refiners Corp.,	821 Exchange Bank Bldg., Tulsa, Okla.	'20
Brown, S. R., San Francisco Mines of Mexico, Ltd.	San Francisco del Oro, Chih., Mexico.	'16
Brown, Sidney A., Mgr., St. Louis Min. & Mill. Co.	Marysville, Mont.	'26
Brown, Thomas Ellis, Jr., Cons. Engr., Associated with Wodell & Hardesty, Cons. Engrs.,	150 Broadway, New York, N. Y.	'16
Brown, Thomas F., Petroleum Chemical Corp.	52 William St., New York, N. Y.	'21
+Brown, Tom S.	1505 American-Traders Nat'l Bank Bldg., Birmingham, Ala.	'28
Brown, W. Horatio, Geol., The Bertha Mineral Co.	Austinville, Va.	'20
Brown, Walter Lyman, Banker, Minsch Monell & Co.	115 Broadway, New York, N. Y.	'23
Brown, Walter M., Min. Engr.	535 East Dayman St., Long Beach, Cal.	'20
Brown, Walter S.	160 Front St., New York, N. Y.	'18
+Brown, Wilda L., Mrs.	Swastika, Ont., Canada.	'21
Brown, William D., Chief Chem., Duquesne Wks., Carnegie Steel Co.	Duquesne, Pa.	'25
Brown, William N., Civil & Min. Engr., Pres., W. N. Brown, Inc.,	1800 E. St., N.W., Washington, D. C.	'08
Brown, William T., Jr., Met. Engr., Westinghouse Lamp Co.	Bloomfield, N. J.	'25
Browne, de Courcy.	8 W. 40th St., New York, N. Y.	'14
Browne, D. G., The Consolidation Coal Co.	15 Broad St., New York, N. Y.	'17
Browne, Kenneth C., Senior Asst. Engr., City Engr's Office, City Hall.	Yonkers, N. Y.	'15
Browne, Ross E., Min. Engr.	234 Perry St., Oakland, Cal.	'94
Browne, Spencer C., Min. Engr.	235 Mountain Ave., Piedmont, Oakland, Cal.	'11
Brownell, Francis Herbert, 1st V.P. & Chairman, Finance Committee, American Smelt. & Refin. Co.,	120 Broadway, New York, N. Y.	'24
Browning, C. P., Min. Engr., Gen'l Mgr., Britannia Min. & Smelt. Co., Ltd.,	Britannia Beach, B. C., Canada.	'18
Browning, Iley B., Pet. Producer & Cons. Geol.	Box 126, Ashland, Ky.	'21
Browning, P. Dewees, Assoc. in Min., School of Mines, Columbia Univ.	New York, N. Y.	'22
Browning, Walter J., Min. Engr.	Apt. 61, Sevilla, Spain.	'02
Browning, William C., Min. Engr.	1218 Pacific Mutual Bldg., Los Angeles, Cal.	'12
Bruce, James L., Res. Dir. & Gen'l Mgr., Cyprus Mines Corp.,	Skouriotissa, Nicosia, Cyprus.	'03
Bruderlin, Emil J., Supt., U. S. Zinc Co.	Amarillo, Tex.	'17
Bruff, Charles E., Mech. Engr.	85 Second St., San Francisco, Cal.	'20
Brugger, A. E., Min. Engr.	c/o Columbus State Bank, Columbus, Neb.	'23
Brugger, Melvin, Mgr., Mine Exploration, Selection Trust, Ltd.,	c/o Messrs. Brown, Shipley & Co., 123 Pall Mall, London, S.W.1, England.	'18

For explanation of symbols, see page 5.

Bruhl, Paul T., Mill Supt., New York & Honduras Rosario Min. Co.,	
	San Juancito, Honduras, C. A. '25
Bruna, Augusto S., Asst. Mgr., Nueva Compania Minera Las Vacas....	Valparaiso, Chile. '26
Brundred, L. L., Cons. Pet. Engr., Brundred & Brundred, Pet. Engrg.,	
	720-1 Pet. Securities Bldg., Los Angeles, Cal. '27
Brunei, Louis J., Gen'l Mgr., Bishop Corp.....	315 Montgomery St., San Francisco, Cal. '16
Bruner, Herman, Civil Engr., National Min. Inspector, Peru	
	Buenos Aires, Argentina. '29
Brunschwyler, John P., Div. Engr., Kingston-Pocahontas Coal Co.....	Kingston, W. Va. '20
Brunton, F. K., Cons. Min. & Met. Engr.....	2333 E. First St., Tucson, Ariz. '11
Brunton, Stopford.....	"Nibooktook," Halfway Brook, Colchester Co., N. S., Canada. '27
†Brussolo, V. A., Min. Engr., Moctezuma Copper Co....	Pilares de Nacozari, Son., Mexico. '20
Bruyere, Alan, Div. Geol., The Texas Co.....	Box 983, Fort Worth, Tex. '17
Bryan, Barnabas, Pettigrew & Meyer, Inc.....	120 Broadway, New York, N. Y. '22
Bryan, Russell Ritchey, Asst. Gen'l Supt. of Mills, Cia. de Real del Monte y Pachuca,	
	Apt. 57, Pachuca, Hgo., Mexico. '19
Bryant, A. D., Min. Engr., Cerro de Pasco Copper Corp.....	Oroya, Peru. '27
Bryant, George W., Min. Engr.....	Box 814, Riverside, Cal. '04
Bryant, Howard S., Skelly Oil Co.....	Tulsa, Okla. '27
†Bryden, James, Met., Electrolytic Zinc Plant, Consolidated Min. & Smelt. Co. of Canada,	
	Ltd., Trail, B. C., Canada. '27
Buch, John W., Special Engr., Operating Dept., Hudson Coal Co.....	Scranton, Pa. '23
Buchanan, D. W., Pres., Old Ben Coal Corp.,	
	1845 Illinois Merchants Bank Bldg., 232 So. Clark St., Chicago, Ill. '18
Buchanan, Donald P. ....	1907 First National Bank Bldg., Detroit, Mich. '27
†Buchanan, Gordon, V.P., Old Ben Coal Corp.,	
	Room 1845, Illinois Merchants Bank Bldg., Chicago, Ill. '20
Buchanan, R. H., Gen'l Mgr., The Hudson Coal Co.....	Scranton, Pa. '16
Buchella, Frank H., Chief Draftsman, Nevada Cons. Copper Co.....	McGill, Nev. '26
†Buchner, Carl F., Geol. & Engr., W. C. McBride, Inc.....	704 Shell Bldg., St. Louis, Mo. '23
Buck, Arthur H., Supt., Eagle Mines, The Empire Zinc Co.....	Gilman, Colo. '20
Buck, C. A., V.P., Bethlehem Steel Co.....	Bethlehem, Pa. '06
Buck, Charles P., Industrial Engr.....	2726 Pennsylvania Ave., Topeka, Kans. '28
Buck, Leonard J., Pres., Leonard J. Buck, Inc.....	74 Trinity Pl., New York, N. Y. '17
†Buck, Victor B. ....	4 West 43rd St., New York, N. Y. '98
Buck, Wilmer Earle, Met., Granite City Steel Co.....	Box 7, Granite City, Ill. '18
†Buckingham, Fisher A., Standard Oil Co. of California.....	San Francisco, Cal. '18
†Buckle, Frank, Field Engr., Granby Cons. Min. Smelt. & Power Co., Anyox, B. C., Canada.	'26
Buckstaff, Sherwood, Geol., Shell Pet. Corp.....	Box 749, Ardmore, Okla. '22
Bucky, Philip Barnett, School of Mines, Columbia Univ.....	New York, N. Y. '21
Budrow, L. R., Cons. Engr., V.P., Lucky Tiger Combination Gold Min. Co.,	
	2346 Third St., San Diego, Cal. '02
Buehler, Henry A., State Geologist.....	Rolla, Mo. '13
†Buel, H. G., V.P., Tilghman Moyer Co.....	141 North Ninth St., Allentown, Pa. '22
Buell, Arthur Whitcomb, Research Production Engr., Midwest Refin. Co., Salt Creek Gas	
	Plant, Midwest, Wyo. '28
Buffington, E. J., Pres., Illinois Steel Co.....	208 South La Salle St., Chicago, Ill. '27
Burford, Joseph S., Jr., Met., Assaying & Refin.....	30 Wall St., New York, N. Y. '13
Bugbee, Edward E., Asst. Prof. of Min. Engrg. & Met., Mass. Inst. Technology,	
	Cambridge, Mass. '05
†Buker, H. W., Mgr., Engine Div., Chicago Pneumatic Tool Co.,	
	6 East 44th St., New York, N. Y. '27
Bull, Irving C., Chemical Expert, Bull & Roberts.....	50 West St., New York, N. Y. '03
Bull, R. A., Cons. Engr.....	541 Diversey Parkway, Chicago, Ill. '12
†Bullard, Edgar Fitch, Geol., Dixie Oil Co., Inc..	16th Floor, Slattery Bldg., Shreveport, La. '20
†Bullard, Edward W., Pres., E. D. Bullard Co.....	275 Eighth St., San Francisco, Cal. '21
Bullen, R. L. ....	Chapman Camp, Kimberley, B. C., Canada. '29
Bullock, J. Davis ....	Address Wanted. '25
Bullock, Stanley C., Min. Engr., Nigerian Cons. Mines,	
	4, London Wall Bldgs., London, E.C. 2, England. '16
Bullwinkel, J. Treadwell, Pres., The Phosphate Min. Co..	110 William St., New York, N. Y. '23
Bulmer, William C., Sales Engr., Blaw-Knox Co.....	Pittsburgh, Pa. '27
Bumbaugh, Frank T., Met. Dept., Carnegie Steel Co.,	
	570 Frick Annex Bldg., Pittsburgh, Pa. '24
Bump, James D., Met., South Dakota State School of Mines.....	Rapid City, S. D. '28
Bunce, E. H., Asst. Chief Research Dir., The New Jersey Zinc Co.....	Palmerton, Pa. '19
Bunge, E. M., Geol., Royal Dutch Oil Co.....	Serang Djaja, Sumatra, D. E. I. '29
Bunker, Charles E., Min. Engr. ....	691 Post St., San Francisco, Cal. '00
Bunyan, F. W., Steel Met., Southern Pacific Railway Co.....	Sacramento, Cal. '18
Burbidge, Frederick, Min. Engr., Gen'l Mgr., Federal Min. & Smelt. Co....	Wallace, Idaho. '87



# 24 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Burbridge, C. E., Jr., Pet. Geol. & Engr., Explorers Club, 544 Cathedral Parkway, New York, N. Y.	'25
Burch, Albert, Min. Engr.....Black Oak Ranch, Medford, Ore.	'00
Burch, H. Kenyon.....576 Chamber of Commerce Bldg., Los Angeles, Cal.	'11
Burchard, Ernest F., Min. Geol., U. S. Geological Survey.....Washington, D. C.	'09
Burden, H. H. ....c/o Henry Burden 2nd, Cazenovia, N. Y.	'83
Burdick, C. Lalor, Asst. Chem. Dir., Lazote, Inc.....Wilmington, Del.	'20
Burdick, Charles A., Min. Engr.....Equitable Bldg., 120 Broadway, New York, N. Y.	'13
Burdick, Edward H., Min. Engr. & Geol.....605 Judge Bldg., Salt Lake City, Utah.	'27
Burdick, Frederick F., Pres., Burdick Corp.....Milton, Wis.	'25
†Burdick, Sherman R., Min. Engr., Miami Copper Co.....Miami, Ariz.	'19
Burgess, Blandford C., Field Mgr., Tenn. Mineral Products Co.....Spruce Pine, N. C.	'20
Burgess, George K., Dir., Bureau of Standards.....Washington, D. C.	'17
Burgess, John A., Min. Engr., Mayflower Associates, Inc., Room 1044, 120 Broadway, New York, N. Y.	'17
Burgess, Lamar W. ....55 Smelter St., Midvale, Utah.	'27
Burgess, Louis, Patent Attorney.....17 Battery Pl., New York, N. Y.	'22
Burgren, Arthur W., Min. Engr., Supt., American Smelt. & Refin. Co., Velardena, Dgo., Mexico.	'17
Burke, James M., Production Engr.....49 Longwood Ave., Fitchburg, Mass.	'18
Burke, Theodore H. D., Chem. & Met. & Steel Foundryman, Otis Elevator Co., 162 Grider St., Buffalo, N. Y.	'25
Burkhart, Otto C., Prof. of Min. Engrg., Virginia Polytechnic Inst.....Blacksburg, Va.	'08
Burkman, J. M. F. ....Terlingua, Tex.	'18
Burley, Fred Harvey, Inspector of Tunnels, City of Detroit, Dept. of Water Supply, Engrs. Office, Water Wks. Park, Detroit, Mich.	'24
Burlingame, Walter E., Gen'l Mgr., The Newlife Min. & Mill. Corp.....Rollinsville, Colo.	'01
Burnett, Jerome B., Chief Geol., Lago Pet. Corp.....Apt. 172, Maracaibo, Venezuela.	'19
Burns, Elmer Z., Min. Engr.....35 Maple Ave., Madison, N. J.	'04
Burns, W. T., Gen'l Mgr., Raritan Copper Wks.....Perth Amboy, N. J.	'03
Burns, William, Min. Engr., N'Changa Mine.....N'Dola, No. Rhodesia, Africa.	'16
Burr, Floyd L., Civ. Engr., Assoc. with Jos. Greenberg.....718 Hammond Bldg., Detroit, Mich.	'20
Burr, Guillermo A. ....246 Fifth Ave., New York, N. Y.	'23
Burr, Samuel P., Min. Engr., Mgr., Golden Messenger Corp., 604 Broadway, Helena, Mont.	'28
Burrage, Albert C., V.P., Chile Copper Co.....85 Ames Bldg., Boston, Mass.	'17
†Burrage, Robert H., Sales Mgr., Southwestern Cons. Graphite Co., 38 Ames Bldg., Boston, Mass.	'16
Burrall, Frederick P., Min. Engr.....Longyear Bldg., Marquette, Mich.	'07
Burrell, George A., Cons. Chem. Engr.....709 Law & Finance Bldg., Pittsburgh, Pa.	'23
Burris, Samuel J., Jr. ....1531 Washington Ave., Baxter Springs, Kans.	'19
Burroughs, A. H., Jr., Pres. & Mgr., Talache Mines, Inc.....Quartzburg, Idaho.	'15
Burrow, Lawrence W., Mgr., Gas Production Dept., Industrial Gas Co., 305 Ouachita National Bank Bldg., Monroe, La.	'20
Burton, Charles R. C., Sales Mgr., International Combustion, Ltd., 11 Southampton Row, London, W. C. 1, England.	'28
Burton, George E. ....Box 214, 419 Simpson Bldg., Ardmore, Okla.	'18
Burton, J. P., Pres., J. P. Burton Coal Co.....8th Floor, National City Bldg., Cleveland, Ohio.	'25
Burwell, Edward B., Jr. ....Upperville, Va.	'25
†Burwell, W. H., Map Draftsman, Andes Copper Min. Co.....25 Broadway, New York, N. Y.	'29
Rury, Ernest.....Whitchester, Haltwhistle, Northumberland, England.	'21
Busey, Alfred P., Jr., Min. Engr.....1601 Chapin Ave., Burlingame, Cal.	'09
Bush, M. W., Pres., Alabama By-Products Corp., 1712 American Trust Bldg., Birmingham, Ala.	'11
Bush, Reed Darrow, State Oil & Gas Supervisor, State of California, Dept. of Pet. & Gas, Ferry Bldg., San Francisco, Cal.	'21
Butcher, F. E. ....2204 Vermilion St., Danville, Ill.	'17
Butler, Archibald, Gen'l Supt., Barnsdall Zinc Co.....Box 235, Joplin, Mo.	'20
Butler, B. S., Min. Geol., Univ. of Arizona.....Tucson, Ariz.	'16
Butler, Bryant Ormond, Student, Harvard Univ.....Cambridge, Mass.	'27
Butler, Cooley, Mine Operator.....643 Title Insurance Bldg., Los Angeles, Cal.	'20
Butler, G. Montague, Dean, College of Mines & Engrg., Director, Arizona Bureau of Mines, Univ. of Arizona, Tucson, Ariz.	'20
Butler, Lucius A.....1019 Swinton St., Sault Ste. Marie, Mich.	'20
Butler, M. C., Coal Min. Engr.....708 Union St., Seattle, Wash.	'10
Butler, P. B., Mine Operator, Min. Div., Barnsdall Corp.....Box 235, Joplin, Mo.	'16
Butler, Percival Page.....1615 E. 7th St., Tucson, Ariz.	'15
Butler, R. S., Chief Engr., Southwestern Engr. Corp., 1221 Hollingsworth Bldg., Los Angeles, Cal.	'17
†Butler, Roy G., Asst. to Transit Engr., The Port of New York Authority, Room 605, 75 West St., New York, N. Y.	'21

For explanation of symbols, see page 5.

Butler, W. Hervey, Shift Boss, Cerro de Pasco Copper Corp.....	Morococha, Peru.	'26
Butler, W. V., Min. Engr., Charge Prospection N. E. Belgian Congo, Société Internationale Forestière et Minière du Congo, Forminière, 42 Rue Royale, Brussels, Belgium.		'20
Butler, Walter, Pres., Walter Butler Co., Inc.....	630 Hamm Bldg., St. Paul, Minn.	'21
Butler, William Cullen Morris, Gen'l Mgr., Central Pennsylvania Quarry Stripping & Constr. Co., Cor. Pine & Buttonwood Sts., Hazleton, Pa.		'24
†Butterbaugh, H. W., Tech. Supervisor, Ansonia Branch, The American Brass Co., Ansonia, Conn.		'27
Butterfield, Howard M., Geol., The Horne Copper Corp.....	Noranda, Que., Canada.	'27
Butters, Charles, 3160 Lewiston Ave., Corner of Alcatraz, E. of College Ave., Berkeley, Cal.		'83
Butterworth, Emerson M., Dist. Geol., South Cal. Div., Standard Oil Co. of California, Box 1390 C., Los Angeles, Cal.		'23
†Buttfield, W. J., Pres., The Vulcan Detinning Co.....	Sewaren, N. J.	'18
Buttram, Frank, Pres., Buttram Petroleum Corp., 313 Mercantile Bldg., Oklahoma City, Okla.		'18
Butts, Allison, Asst. Prof. of Met., Lehigh Univ.....	Bethlehem, Pa.	'17
Buzby, Arthur Dudley, Cons. Engr., Florida Theater Bldg.....	Jacksonville, Fla.	'18
Byars, Roy William.....	Box 115, Stroud, Okla.	'29
Byers, Jack, Student, Michigan College of Mines.....	Houghton, Mich.	'26
Byler, R. E., The Mexican Corp., S. A. ....	Fresnillo, Zac., Mexico.	'24
Byron, John E., Cons. Min. Engr.....	642 University Ave., Boulder, Colo.	'28
Cabell, C. A., V.P., Carbon Coal Co.....	Carbon, W. Va.	'15
†Cabot, James J., V.P., Godfrey L. Cabot, Inc., 804 Virginian Land Bank Bldg., Charleston, W. Va.		'26
Cabot, John, Jr., A. M. Hoyt & Co.....	300 Madison Ave., New York, N. Y.	'99
Caddick, Arthur J., Cons. Chem. & Met. Engr.....	18 Marton Rd., Middlesbrough, England.	'20
†Cadman, A. M., Sec. & Treas., A. W. Cadman Mfg. Co.....	2816 Smallman St., Pittsburgh, Pa.	'18
Cadogan, John Lucas.....	Address Wanted.	'21
Cadot, J. J., V.P. & Wks. Mgr., Hardinge Co., Inc.....	York, Pa.	'18
Cady, Gilbert H., Senior Geol., Illinois State Geol. Survey.....	Urbana, Ill.	'29
CAETANI, GELASIO.....	Palace Caetani, 32 Botteghe Oscure, Rome, Italy.	'23
†Cain, Edward H., Pet. Engr., Skelly Oil Co.....	722 S. Main St., Sapulpa, Okla.	'29
Cain, Frank D., Asst. Chief Engr., West Kentucky Coal Co.....	Earlington, Ky.	'19
Cain, Joseph, Supt., Gulf States Steel Co.....	Altoona, Ala.	'21
†Caine, K. E., Min. Engr., Joy Mfg. Co.....	Franklin, Pa.	'25
Caine, Milton A., Min. Engr., Sec., Tennessee Copper & Chem. Corp., Room 1824, 61 Broadway, New York, N. Y.		'06
Calbeck, J. H., Dir. of Research, The Eagle Picher Lead Co.....	Joplin, Mo.	'25
Calhoun, Allan B., Min. Engr., Burmah Corp., Ltd.....	Bawdwin, N.S.S., Burma, India.	'16
†Calhoun, Frederick W.....	R. F. D. No. 2, Box 208, Bessemer, Ala.	'24
†Calhoun, W. A., Min. Engr., American Zinc Co. of Tenn.....	Box 133, Mascot, Tenn.	'25
Calkins, F. E., Min. Engr.....	1238 El Centro Ave., Hollywood, Cal.	'17
†Callahan, William H., Bertha Mineral Co.....	Austinville, Va.	'26
Calland, Dean S. ....	Box 32, Point Loma, Cal.	'10
Callaway, L. A., Andes Copper Min. Co.....	Casilla B, Antofagasta, Chile.	'15
Callaway, S. D., Manufacturers Rep.....	31 & Roanoke Rd., Kansas City, Mo.	'14
†Callbreath, J. F., Jr., Sec., The American Min. Congress, 841 Munsey Bldg., Washington, D. C.		'09
Callen, Alfred Copeland, Head, Min. Engrg. Dept., Univ. of Illinois, 209 Transportation Bldg., Urbana, Ill.		'18
Callow, J. M., Cons. Engr., Pres. & Gen'l Mgr., The General Engrg. Co., Inc., Room 1242, 50 Broad St., New York, N. Y.		'06
†Callow, Michael J., Met. Engr., The General Engrg. Co.....	Salt Lake City, Utah.	'27
Calvert, C. E., Foreman, Mt. View Mine, Anaconda Copper Min. Co.....	Butte, Mont.	'17
Calvin, Carl J., Asst. Chief Engr., Great Northern Iron Ore Properties, 509 Third Ave., Hibbing, Minn.		'21
†Cameron, Barton H., Cons. & Mech. Engr.....	Gordonsville, Va.	'28
Cameron, Francis, Geol. & Supt., Foster S. Naething, Agent...Box 31, Farmington, Mo.		'29
Cameron, Frank, Mine Supt., Patino Mines & Enterprises Cons. Inc.....	Llallagua, Bolivia.	'15
†Cameron, John D., Engrg. Dept., Consolidated Copper Mines Corp.....	Box 205, Kimberly, Nev.	'27
Cameron, William McC., Celanese Corp. of America, 180 Madison Ave., New York, N. Y.		'97
Camm, J. Palmer, Engr., Atlas Portland Cement Co.....	Watonga, Okla.	'23
†Campana, Jose L., Min. & Pet. Engr., Student, The Ohio State University, 2076 Peasly St., Columbus, Ohio.		'28
†Campbell, A. B., Chem. & Met. Engr., Oilver United Filters, Inc., Federal Reserve Bank Bldg., Sansome & Sacramento Sts., San Francisco, Cal.		'22
Campbell, Alexander George, "Metung" Jennings St., Sandringham, Melbourne, Australia.		'21
†Campbell, Beryl H., Operator in Preparation Plants, Pittsburgh Coal Co., 110 Fourth St., West Newton, Pa.		'27

Campbell, C. M.	4622 Bellevue Dr., Vancouver, B.C., Canada.	'22
Campbell, David H., Min. Engr.	Iron River, Mich.	'28
Campbell, E. E., Cons. Min. Engr.	200 Bay St., Toronto, Ont., Canada.	'17
†Campbell, E. Taylor, Geol., St. Louis Smelt. & Refn. Wks., National Lead Co.,	St. Francois, Mo.	'23
Campbell, Erroll P., Production Engr., Standard Oil Co. of California.	Bin XX, Taft, Cal.	'26
Campbell, H. B., Gen'l Supt. of Mines, Harbison-Walker Refractories Co.,	1800 Farmers Bank Bldg., Pittsburgh, Pa.	'23
Campbell, James R., Bituminous Rep., American Rheolaveur Corp.,	506 Brennen Bldg., Box 486, Scottdale, Pa.	'28
Campbell, John Hayes, Cons. Met.	7007 Maryland Ave., St. Louis, Mo.	'18
Campbell, Joseph W., Soil Corrosion Engr., Columbia Engrg. & Management Corp.,	99 N. Front St., Columbus, Ohio.	'21
Campbell, K. P., Cia. Minera Asarco.	Matehuala, S.L.P., Mexico.	'20
Campbell, Marius R.	2220 Twentieth St. N.W., Washington, D. C.	'92
Campbell, Robert B., Cons. Geol.	Suite 800-802, Western Reserve Bldg., San Angelo, Tex.	'29
Campbell, Stewart, Idaho State Mine Inspector.	State House, Boise, Idaho.	'21
Campbell, Thomas E.	Room 5122, Interior Dept. Bldg., Washington, D. C.	'18
†Campbell, Thomas P., Electrochemical Engr.	818 Patterson Bldg., Denver, Colo.	'24
Campbell, W. C., Central Manitoba Mines, Ltd.	Wadhope, Man., Canada.	'14
Campbell, William, Saville Shaw Medal, S. of C. I., Newcastle Section, 1903; <i>Howe Memorial Lecturer</i> , 1926; Prof. of Met., School of Mines, Columbia Univ., New York, N. Y.		'03
Camphuis, George A.	503 W. P. Story Bldg., 610 S. Broadway, Los Angeles, Cal.	'01
Campion, Edward W., Asst. Supt., Buckeye Steel Castings Co.	Columbus, Ohio.	'20
Camsell, Charles, Deputy Minister of Mines, Dept. of Mines.	Ottawa, Ont., Canada.	'25
†Canales, Francisco A., Min. Engr.	Box 407, Butte, Mont.	'29
Canby, R. C., Cons. Met.	330 S. Main St., Wallingford, Conn.	'82
Canfield, G. H.	617 Central Bank Bldg., Oakland, Cal.	'20
Cantley, C. L., Min. & Met. Engr.	50 Broadway, New York, N. Y.	'12
Cantley, Thomas, Met. Engr.	New Glasgow, N. S., Canada.	'07
†Cape, A. Tregoning, Met., Central Alloy Steel Corp.	Massillon, Ohio.	'29
Caperton, W. Gaston, Pres. & Gen'l Mgr., Slab Fork Coal Co.	Slab Fork, W. Va.	'94
Capillon, Edward A., Met. Engr., D. E. Makepeace Co.	Attleboro, Mass.	'23
Caples, Russel B., Chem., Asst. Gen'l Supt., Anaconda Copper Min. Co.,	Great Falls Reduction Dept., Great Falls, Mont.	'13
Capp, J. A., Chief of Testing Laboratory, General Electric Co.	Schenectady, N. Y.	'96
†Cappeau, Jo. P.	Room 1041, Kennedy Bldg., Tulsa, Okla.	'21
Cardenas, Adolfo, Gen'l Mgr., Ferrocarril del Pacifico de Nicaragua,	Managua, Nicaragua, C. A.	'03
Cardozo, Henri A.	50 Rue Boissière, Paris 16°, France.	'98
Carey, C. Eugene, Min. Engr., Supt., Bates Iron Co.	Iron River, Mich.	'20
Carlborg, Harald, Engr. of Mines, First Engr., Mines Branch, Royal Board of Trade,	Kommerskollegium, Stockholm, Sweden.	'28
†Carleton, Edwin J., Min. Engr.	600 New York Life Bldg., Minneapolis, Minn.	'20
Carlisle, G. Lister, Jr.	Norfolk, Conn.	'16
Carlisle, Henry C., Chief Engr., Western Div., Tonopah Min. Co. of Nevada,	315 Montgomery St., San Francisco, Cal.	'17
Carlock, J. B., Chief Engr., So. Side Wks., Jones & Laughlin Steel Corp.,	Twenty seventh & Carson Sts., Pittsburgh, Pa.	'17
Carlson, Clifford E., Asst. Supt., National Valve & Mfg. Co.,	3101 Liberty Ave., Pittsburgh, Pa.	'28
Carlson, Edwin C., Min. Engr., Oliver Iron Min. Co.	Ironwood, Mich.	'26
Carlton, A. C., Gen'l Supt., Baltimore Copper Smelt. & Roll. Co.	Baltimore, Md.	'21
Carlton, A. E., Mining and Banker,	800 Exchange National Bank Bldg., Colorado Springs, Colo.	'06
Carlyle, E. J., Met. Engr., Northern Peru Min. & Smelt. Co., Casilla 162, Trujillo, Peru.		'11
Carmean, Carl K., Asst. Supt., Federal Min. & Smelt. Co.	Baxter Springs, Kans.	'23
Carmichael, Norman.	Box 175, Duxbury, Mass.	'99
Carnahan, Charles T.	Summerville, S. C.	'80
Carnahan, Thomas S., Cons. Min. Engr., Union Minière du Haut Katanga,	3 Rue de la Chancellerie, Brussels, Belgium.	'13
Carney, Frank D., Cons. Engr.	27 Pine St., New York, N. Y.	'12
Caron, M. H., Prof. of Met.	Delft, Netherlands.	'18
Carpenter, Alvin B.	1903 Pinehurst Rd., Los Angeles, Cal.	'97
Carpenter, Arthur Howe, Research Met., Asst. Prof. of Met., Armour Institute of Tech.	Chicago, Ill.	'05
Carpenter, Clark B., Prof. of Fuel Engrg. & Met., Colorado School of Mines.	Golden, Colo.	'19
Carpenter, Cranston Howe, Section Engr., Industrial Heating Dept.,	Westinghouse Electric & Mfg. Co., Mansfield, Ohio.	'19
Carpenter, George O., V.P., National Lead Co.	722 Chestnut St., St. Louis, Mo.	'16

For explanation of symbols, see page 5,



Carpenter, Howard B., Gen'l Supt., Republic Iron & Steel Co., 290 Lora Ave., Youngstown, Ohio.	'14
Carpenter, Jay A., Prof. of Min., Mackay School of Mines, Univ. of Nevada.....Reno, Nev.	'16
Carpenter, Malcolm Howe, Mgr., The Mine & Smelter Supply Co.....El Paso, Tex.	'22
Carpenter, William George.....Rio Guinobatan, Masbate, P. I.	'23
Carper, Armistead F.....319 Wing St., Glendale, Cal.	'27
Carper, J. O. A., Min. Engr. & Operator.....201 Boston Bldg., Denver, Colo.	'26
Carr, George W., Party Chief, Geophysical Work, Roxana Pet. Corp., Dallas Athletic Club Bldg., Dallas, Tex.	'26
†Carr, Herbert J., Mngng. Dir., Anglo Mexican Pet. Co., Ltd., & Pres., Carr Bros., Inc., 65 Broadway, New York, N. Y.	'25
Carr, Homer L., Min. Engr., Asst. Mgr., Min. Dept., American Smelt. & Refin. Co., 1112 Mills Bldg., El Paso, Tex.	'13
Carr, R. P., Min. Engr.....Casilla 1557, Santiago, Chile.	'20
Carr, Raymond M., Pet. Engr., Sinclair Oil & Gas Co.....Tulsa, Okla.	'29
†Carrasco Calvo, Juan L., Min. Engr., Asst. Machine Shop Foreman, Chile Exploration Co., Chuquicamata, Chile.	'18
Carrie, G. M., Gen'l Mgr., Scottish Canadian Magnesite Co., Ltd....Magnesite, Que., Canada.	'25
Carrigan, Andrew.....Room 816, Rialto Bldg., San Francisco, Cal.	'99
Carrigan, J. J., Asst. Gen'l Supt. of Mines, Anaconda Copper Min. Co., Drawer 1875, Butte, Mont.	'17
Carroll, Alexander W., Cons. Engr.....524 Westminster Ave., Elizabeth, N. J.	'17
†Carroll, Daniel B., Geol., Standard Oil Co. of California.....Box 1125 Kemmerer, Wyo.	'20
Carroll, Daniel J., Stone & Webster Engrg. Corp.....Marble Hall Hotel, Mount Carmel, Pa.	'20
Carrouche, Lucien F., Mine Supt., Cia. Minera del Cubo, S. A., Apt. 49, Guanajuato, Gto., Mexico.	'20
Carson, A. C., Min. Engr.....850 Powell St., Apt. 403, San Francisco, Cal.	'84
Carson, Orrin A., Dept. of Min. & Met., Queen's Univ.....Kingston, Ont., Canada.	'24
Carson, R. F., Chief Engr., Cole & Crane Real Estate Trust & Dingess-Rum Coal Co., Room 1002, 1st Huntington National Bank Bldg., Huntington, W. Va.	'26
Carstarphen, Frederick Charles, Cons. Engr., Specializing in Aerial Tramways, 721 Marion St., Denver, Colo.	'29
Carter, Frederic E., Physical Met., Baker Platinum Works, Austin & Murray Sts., Newark, N. J.	'17
Carter, John Manning, Mill Mgr., Nipissing Min. Co., Ltd.....Cobalt, Ont., Canada.	'25
†Carter, P. L., Chem., Atlantic Refin. Co.....3144 Passyunk Ave., Philadelphia, Pa.	'21
Carter, R. Preston, Student, Mass. Inst. of Tech.....Cambridge, Mass.	'28
Carter, Ralph R., Division Engr., Lehigh & Wilkes-Barre Coal Co., Audenried, Carbon Co., Pa.	'17
Cartlidge, Oscar, Cons. Engr.....1593 Lee St., Charleston, W. Va.	'13
Cartwright, Charles K., Mining Supt., Gold Hunter Min. & Smelt. Co.....Mullan, Idaho.	'21
†Carus, Edward Hegder, Resident & Gen'l Mgr., Carus Chemical Co.....La Salle, Ill.	'19
†Carus, H. D., Matthiessen & Hegeler Zinc Co.....La Salle, Ill.	'27
†Carver, Roger D., Fdry. Research & Tests, River Wks., General Electric Co., West Lynn, Mass.	'23
Cary, Webster P., Plant Engr., American Smelt. & Refin. Co.....Selby, Cal.	'16
Case, Albert H., Cons. Engr., General Dev. Co.....61 Broadway, New York, N. Y.	'06
Case, W. B., Shell Pet. Corp.....Drawer 8, St. Louis, Mo.	'27
†Caselton, James A., 2nd V.P. & Sec., St. Louis Smelt. & Refin. Co., 722 Chestnut St., St. Louis, Mo.	'14
Cashin, D'Arcy M., Chief Geol., Navarro Oil Co.....329 Humble Bldg., Houston, Tex.	'20
Caster, Ermil Leslie, Prod. Engr., Arkansas Natural Gas Corp.....Shreveport, La.	'30
Castle, S. N.....Honolulu, H. I.	'17
†Castro, Jose M., Geol., Tropical Oil Co.....Barranca Bermeja (Infantas), Colombia.	'27
Cates, Louis S., V.P. & Gen'l Mgr., Utah Copper Co.....Box 1775, Salt Lake City, Utah.	'04
Catlin, R. M., Min. Engr., New Jersey Zinc Co.....Franklin, N. J.	'00
Catron, William, Supt. Mines, Cananea Cons. Copper Co., Chivatera P.O., Cananea, Son., Mexico.	'24
Cattell, Roscoe A., Pet. Engr., U. S. Bureau of Mines.....Washington, D. C.	'25
Caudill, Samuel J., Cons. Pet. Engr.....1504 Philtower Bldg., Tulsa, Okla.	'19
Cautley, A. O., Min. Engr.....Adelaide House, King William St., London, E.C.4, England.	'03
Cavanagh, John L., Min. Engr., Resident Mgr., Malagash Salt Co., Ltd., Malagash, N.S., Canada.	'14
Cavers, T. Willard, Min. & Met. Engr., Granby Cons. Min. Smelt. & Power Co., Anyox, B.C., Canada.	'11
†Cawthra, Henry I., Constr. Engr., Assoc. with A. J. Thomas, 1549 Lee Rd., Cleveland Heights, Ohio.	'24
Cazin, Franz.....2150 Lafayette St., Denver, Colo.	'89
Cebat, Paul, Engr., Perin & Marshall.....11 W. 42nd St., New York, N. Y.	'21
Chabot, Lucien Samuel, Jr., Volunteer Mine.....Palmer, Mich.	'26
Chadbourne, H. W., Min. Engr.....120 Broadway, New York, N. Y.	'11

# 28 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

†Chadbourne, Waldemar A., Lawyer.....	120 Broadway, New York, N. Y.	'21
†Chadwick, Louis R., New York Office Mgr., Sullivan Machinery Co., 30 Church St., New York, N. Y.		'20
Chaffin, C. E., Met. Engr., The General Engrg. Co., Room 1242, 50 Broad St., New York, N. Y.		'20
Chalmers, A. G. N., Supt., St. John del Rey Min. Co., Ltd., Morro Velho, Villa Nova de Lima, Minas Geraes, Brazil.		'21
Chalmers, John W. P., Min. & Elec. Engr., 30 College St., Dowgate Hill, London, E. C., England,		'13
†Chalmers, Joseph, Assoc. Pet. Engr., U. S. Bureau of Mines.....	Bartlesville, Okla.	'22
Chalmers, William J.....	Room 1029, 208 S. La Salle St., Chicago, Ill.	'94
†Chamberlain, James B.....	1534 N. Kenmore Ave., Los Angeles, Cal.	'24
Chambers, A. R., Cons. Engr., V.P., Malagash Salt Products, Ltd., New Glasgow, N. S., Canada.		'16
Chambost, Pierre J. E. E.....	28 Avenue de Suffren, Paris, France.	'03
Chance, H. M., Min. Engr.....	839 Drexel Bldg., Philadelphia, Pa.	'74
Chance, Thomas Mitchell, Cons. Min. Engr., Partner, H. M. Chance & Co., 843 Drexel Bldg., Philadelphia, Pa.		'19
Chandler, Albert R., Pacific Coast Representative, M. W. Kellogg Co., 742 Western Pacific Bldg., Los Angeles, Cal.		'26
Chandler, Charles D., Min. Engr., Verona Min. Co.....	Caspian, Mich.	'26
†Chandler, Charles S., Min. Lawyer.....	582 Market St., San Francisco, Cal.	'28
Chandler, John W., Shift Boss, United Verde Copper Co.....	Box 24, Jerome, Ariz.	'23
Chaney, S. E., Mgr., Utah Placer Gold Mines, Inc.....	Hanksville, Utah.	'29
Chang, Kingfan, National Construction Commission.....	Nanking, China.	'27
Channing, J. Parke, Cons. Min. Engr.....	61 Broadway, New York, N. Y.	'84
Channing, R. H., Jr.....	725 Standard Oil Bldg., San Francisco, Cal.	'04
Chapin, Edward J., Anglo-Chilean Cons. Nitrate Corp.....	Casilla 17, Tocopilla, Chile.	'27
Chapin, Theodore, Chief Geol., Cia. de Terrenos Petroliferos Imperio, Apt. 1388, Tampico, Tamps., Mexico.		'20
Chapman, Cyril T., Sales Engr., Ingersoll-Rand Co., Williamson Bldg., Cleveland, Ohio.		'25
Chapman, Edward P., Min. Geol.....	506 W. 7th St., Leadville, Colo.	'21
Chapman, George A., Met. Minerals Separation North American Corp., 61 Broadway, New York, N. Y.		'17
Chapman, Irving A., William Nicholas & Moran.....	25 Broad St., New York, N. Y.	'14
Chapman, James, Mech. Engr., Fraser & Chalmers (S. A.) Ltd., Delmore House, Marshall St., Box 619, Johannesburg, Transvaal, Africa.		'17
Chapman, Thomas G., Met., Univ. of Arizona.....	Tucson, Ariz.	'20
†Charles, Albert John, Cons. Geol. & Mineralogist., Walton Ave., Locust Valley, L. I., N. Y.		'29
†Charles, B. E., Cia. Minera de La Cienega.....	La Cienega, Dto. de Rayon, Chih., Mexico.	'22
Charles, I. M., Sec. & Treas., Douglass, Corey & Fisk, Inc., First National Bank Bldg., Trinidad, Colo.		'19
Charles, W. W.....	1110 Pacific Mutual Bldg., Los Angeles, Cal.	'10
†Chartkoff, Edith Paula, (Miss), Research Met., Cleveland Wire Wks. of General Electric Co., Cleveland, Ohio.		'29
Chase, Charles A., Mgr., Shenandoah-Dives Syndicate.....	777 Williams St., Denver, Colo.	'00
Chase, E. E., Min. Engr. & Geol.....	1450 Williams St., Denver, Colo.	'03
Chase, F. D.....	Bridgton, Me.	'84
Chase, March F., Cons. Engr., Chase & Waring.....	420 Lexington Ave., New York, N. Y.	'16
†Chase, Philip W., Min. Geol., Cerro de Pasco Copper Corp.....	Morococha, Peru.	'27
Chase, R. L., Min. Geol. & Engr.....	900 California Bank Bldg., Los Angeles, Cal.	'19
†Chatfield, Chester H., Met., Handy & Harman.....	Bridgeport, Conn.	'20
Chavez, Alberto G., Min. Engr.....	Calle Cuarta 333, Chihuahua, Chih., Mexico.	'28
Chavez, Raúl, Pet. Geol. & Engr.....	Apt. 410, Tampico, Tamps., Mexico.	'18
Check, Elliott E., Min. Engr.....	833 43rd Ave., San Francisco, Cal.	'27
Chedsey, William R., Prof. of Min., Penn. State College.....	State College, Pa.	'10
†Chen, Tsekwei C., Mgr., The American-Oriental Bank of Fukien.....	Amoy, China.	'21
†Chen, Z. C., Min. Engr., Han-Yeh-Ping Iron & Coal Co., 36 Szechuen Rd., Shanghai, China.		'20
Cheney, Charles A., Geol.....	329 Ritz Bldg., Tulsa, Okla.	'18
Cheney, G. M., Mine Engr., Andes Copper Min. Co.....	Casilla B. Antofagasta, Chile.	'17
Cheney, M. G., Geol., Pres., Anzac Oil Corp. & Monroe Prod. Co.....	Coleman, Tex.	'21
Chennells, J. A., c/o Postmaster, Mbarara, Western Province.....	Uganda, E. Africa.	'02
Chenneour, R. J., Asst. to Chief Engr., Cleveland-Cliffs Iron Co.....	Ishpeming, Mich.	'20
†Chepard, Jacques C., Student, Mass. Inst. of Tech.....	Cambridge, Mass.	'29
Chevalier, Jerome A., Cons. Geol.....	311 Thompson Bldg., Tulsa, Okla.	'18
Chiapella, Stephen Eugene.....	3847 So. Broadway, Los Angeles, Cal.	'26
Chibas, Eduardo J., Cons. Engr.....	Calle 17, No. 72, Esquina H. Vedado, Havana, Cuba.	'96
Chikanzeff, Ivan, Min. Engr., The Lena Goldfields, Ltd., 4 London Wall Bldgs., London, E.C.2, England.		'21
†Child, Ralph S., Investment Banking, Bonbright & Co., Inc., 25 Nassau St., New York, N. Y.		'19

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Childs, Albert T., Research Engr., General Electric Co.....	Pittsfield, Mass.	'23
Chilson, Ernest, V.P. & Gen'l Mgr., Raleigh Coal & Coke Co.....	Raleigh, W. Va.	'27
Chippendale, Arthur, Chem., Cons. Work....	Bruselas 10, Mexico City, D. F., Mexico.	'39
Chisholm, William Francis, Geol. & Engr., Dir., Minerals Div., Dept. of Conservation, State of Louisiana, 304 Ward Bldg., Shreveport, La.		'27
Chivvis, Norman, Met., More Jones Div., National Bearing Metals Corp.....	St. Louis, Mo.	'18
Choffel, F. A., Mgr., Ingersoll-Rand Co.....	Paris, France.	'16
Chonette, William C., Shell Oil Co.....	Brea, Cal.	'26
Chou, Chih-Hung, c/o Y. K. King, Shanghai Savings Bank, Ltd., Honkou, Shanghai, China.		'28
Christensen, A. Lee.....	294 No. Main St., Salt Lake City, Utah.	'24
Christenson, Alfred J., Min. Engr., E. J. Longyear Co., 710 Security Bldg., Minneapolis, Minn.		'21
†Christian, J. Barbour, Asst. Engr., North Jersey District Water Supply Commission, Wanaque, N. J.		'27
Christian, J. Dearing, Asst. to Pres. & Gen'l Mgr., Imperial Colliery Co., Box 141, Lynchburg, Va.		'26
Christianson, Peter, Prof. of Met., School of Mines, University of Minnesota, Minneapolis, Minn.		'01
Christie, John Livermore, Met., Bridgeport Brass Co.....	Box 2012, Bridgeport, Conn.	'21
Christie, Robert S.....	Box 545, Big Springs, Tex.	'25
Christie, W. H., Min.....	Room 601, 604 Mission St., San Francisco, Cal.	'16
Christine, M. Clark, Student, Missouri School of Mines.....	Rolla, Mo.	'28
Christy, Harold H., Chief Engr., Water Dept., Colorado Fuel & Iron Co.....	Pueblo, Colo.	'22
Chrystie, Percival, Pres., Taylor-Wharton Iron & Steel Co.....	High Bridge, N. J.	'20
Church, J. A., Jr., Cons. Engr.....	522 Fifth Ave., New York, N. Y.	'07
Clagett, Thomas H., Chief Engr., Pocahontas Coal & Coke Co.....	Bluefield, W. Va.	'12
Clagett, W. H., Assayer, Smelter Rep., Bunker Hill Smelter, Hecla Min. Co., Kellogg, Idaho.		'25
Claghorn, Clarence R., Min. Engr.....	715 Continental Bldg., Baltimore, Md.	'84
Clamer, G. H., Elliot Cresson Medal, Franklin Inst., 1902; Pres. & Gen'l Mgr., The Ajax Metal Co., 46 Richmond St., Philadelphia, Pa.		'13.
Clapp, Charles H., Pres., State Univ. of Montana.....	Missoula, Mont.	'14
Clapp, F. G., Cons. Pet. Engr.....	Room 1351, 50 Church St., New York, N. Y.	'10
Clapp, Lawrence R., Min. Engr., V.P., The New Haven Copper Co.....	Seymour, Conn.	'12
Clark, A. L., Mgr., Tamaya Property, American Smelt. & Refin. Co., Casilla 114, Ovalle, Chile.		'23
Clark, Adolph Clayton, Executive, Raritan Copper Works.....	Perth Amboy, N. J.	'14
Clark, Allan J., Met., Homestake Mining Co.....	Lead, S. D.	'97
Clark, Benjamin F., Jr., Sales Engr., American Manganese Steel Co., 230 Park Ave., New York, N. Y.		'21
Clark, C. R., Asst. Field Mgr., Anglo-Persian Oil Co., Ltd.....	Mohammerah, South Persia.	'22
Clark, Charles W., Pres., United Verde Copper Co.....	111 Broadway, New York, N. Y.	'17
Clark, Charles William, Supt., Chem. Dept., Nichols Copper Co....	Laurel Hill, L. I., N. Y.	'27
Clark, Douglas, Geol., Southern Pacific Co....	643 Southern Pacific Bldg., San Francisco, Cal.	'15
Clark, Edward H., Pres., Homestake Min. Co. & V.P., Cerro de Pasco Copper Corp., Bank of America Bldg., 44 Wall St., New York, N. Y.		'14
Clark, F. E., Met. Engr., H. A. Brassett & Co., 310 S. Michigan Ave., 1620 Straus Bldg., Chicago, Ill.		'29
Clark, Farley G., Cons. Engr.....	251 Russell Hill Rd., Toronto, Ont., Canada.	'21
†Clark, Frances Hurd, Metallographist, Western Union Telegraph Co., 195 Broadway, New York, N. Y.		'27
Clark, Frank R., Chief Geol., Mid-Kansas Oil & Gas Co.....	Box 3307, Tulsa, Okla.	'20
Clark, George Huntington, Cons. Engr.....	Room 212, Clark Bldg., Birmingham, Ala.	'22
Clark, George Lyman, Div. Engr., State Highway Dept.....	Joplin, Mo.	'16
Clark, George M., Sec. & Treas., California Rock Co., 728 Mills Bldg., 220 Montgomery St., San Francisco, Cal.		'99
Clark, H. Smith, Geol., charge of Texas Div., Sinclair Oil & Gas Co., Box 1350, Fort Worth, Tex.		'17
Clark, J. E. S., Min. Engr.....	805 Rosedale Ave., White Plains, N. Y.	'11
†Clark, J. Murray.....	70 Tranby Ave., Toronto, 5, Ont., Canada.	'08
†Clark, James A., Asst. Gen'l Supt., Lago Pet. Corp.....	Maracaibo, Venezuela.	'20
Clark, Lindesay C., Min. Engr., Gen'l Mgr., The Briseis Tin & General Min. Co., Ltd., Derby, Tasmania.		'99
Clark, Louis F., Cie. des Mines de Saint Sébastien, Saint Sébastien, par Generagues, Gard, France.		'19
Clark, Maurice.....	Gardanier Apts., Douglas, Ariz.	'86
Clark, Ronald, Engr.....	86, Blvd. de St. Cloud, Garches (S.-et-O.) France.	'16
Clark, Walter Gordon, Cons. Engr., 1211 Insurance Exchange Bldg., 318 W. 9th St., Los Angeles, Cal.		'23
Clark, Walter R., Wks. Mgr., Bridgeport Brass Co.....	1875 Park Ave., Bridgeport, Conn.	'20
Clark, Will L.....	346 N. Kenwood St., Glendale, Cal.	'03
†Clark, William A., Pet. Engr.....	Box "N", Taft, Cal.	'27



Clark, William Andrews, Jr., Min. Engr., Pres., Clark Interests,	503 Miner Bldg., Butte, Mont.	'16
Clarke, Alexander C., Min. Engr.....	Ponsanooth, Perranwell Sta., Cornwall, England.	'11
Clarke, Harry E.....	Box 115, St. Clair, Mo.	'26
Clarke, Hopewell.....	1027 Summit Ave., St. Paul, Minn.	'96
†Clarke, R. H.....	Midland Hotel, Denver, Colo.	'17
Clarke, Roy H., Mgr., Cia. Occidental Mexicana, Santa Rosalia, Lower California, Mexico.		'11
Clarke, S. S., Min. Engr., Supt., Bendelari Mine, Eagle-Picher Lead Co., Picher, Okla.		'13
Claudet, F. H. B., Assayer to the Bank of England, 6-7 Coleman St., London, E. C., England.		'14
Claudet, H. H., Cons. Engr.....	Rockcliffe Park, Ottawa, Ont., Canada.	'03
Clay, Roy G., Min. Engr., Bethlehem Mines Corp., Min. Engr. Dept.....	Johnstown, Pa.	'28
Clayberg, George A., Min. Engr., Christmas Copper Co.....	Box 3, Christmas, Ariz.	'29
Clayden, Arthur Ludlow, Research Engr., Sun Oil Co.....	Philadelphia, Pa.	'26
Claypool, W. M., Min. Engr.....	San Bernardino, Cal.	'84
Clayton, Charles Y., Dept. of Met. & Ore Dressing, Missouri School of Mines, Rolla, Mo.		'16
Claytor, William, Colliery Agent, The Clifton Colliery Co., Ltd.....	Nottingham, England.	'27
Clearman, Frederick.....	305 W. 8th St., Rolla, Mo.	'27
Cleveland, Newton, Min. Engr. & Gen. Mgr., Yuba Mfg. Co.,	351 California St., San Francisco, Cal.	'01
Cleland, Herdman F., Prof. of Geol., Williams College.....	Williamstown, Mass.	'20
†Clemence, L. M., St. John del Rey Min. Co., Ltd., Villa Nova de Lima, Minas Geraes, Brazil.		'27
Clement, Harrison E., Abana Mine, Dupuy.....	Abitiby, Que., Canada.	'02
†Clements, Donald S.....	1943 W. 79th St., Los Angeles, Cal.	'20
Clements, Willis C.....	43 Venango St., Johnstown, Pa.	'27
Clemmitt, Willis B., Met. Engr., Supervisor of Fuel Sales, Consolidated Gas, Electric Light & Power Co., Lexington Bldg., Baltimore, Md.		'17
Clendenin, Thomas P., Min. Geol., American Smelt. & Ref. Co.,	1112 Mills Bldg., El Paso, Tex.	'20
Cleveland, E. A., Chief Commissioner, Greater Vancouver Water Board,	Bekins Bldg., Vancouver, B. C., Canada.	'03
Clevenger, Galen H., Cons. Met.....	1 State St., Boston, Mass.	'03
Clifton, Roland L., Chief Geol. & Engr., Champlin Refin. Co.....	Enid, Okla.	'28
†Clinch, Walter D., Field Engr., American Cyanamid Co., 405 N. Sergeant Ave., Joplin, Mo.		'20
Cline, Justus H.....	Stuarts Draft, Va.	'20
Cloonan, Michael P., Supt., Colorado Fluorspar Corp.....	Cowdrey, Colo.	'24
Close, Frederic B., Min. Engr.....	926 Westmoreland Ave., Los Angeles, Cal.	'17
Closuit, E. M.....	Address Wanted.	'25
Clothier, Conrad F., Resident Engr., New River & Pocahontas Cons. Coal Co.,	Minden, W. Va.	'20
Clymer, Frederick H., Min. Engr.....	97 Shewell Ave., Doylestown, Pa.	'97
Coates, Thomas, Colliery Supt., Hudson Coal Co.....	Lafin, Pa.	'27
Cobb, Collier, Univ. of North Carolina.....	Chapel Hill, N. C.	'14
Cobb, H. McL., Gen'l Mgr., Soto Mines Co.....	Guanacavi, Dgo., Mexico.	'04
†Coburn, William H., Investment Banker, Partner—Coburn, Kittredge & Co.,	68 Devonshire St., Boston, Mass.	'20
†Cochran, H. A., Min. Engr., Geol. Survey of Nigeria, P.O. Sokoto, Nigeria, British W. Africa.		'29
†Cochran, Ira C., Commissioner, American Wholesale Coal Association,	729 Woodward Bldg., Washington, D. C.	'27
Cochran, R. B., Min. Engr., Independent Oil Operator, Apt. 520, Tampico, Tamps., Mexico.		'19
†Cochrane, John H., Owner, Cochrane Brass Fdry.....	Bolls Ave., York, Pa.	'18
Cocke, A. Lewis, Humble Oil & Refin. Co.....	Sugarland, Tex.	'28
Cockerell, L. Maurice, Cons. Min. Engr. General Practice,	3, London Wall Bldgs., London, E.C.2, England.	'00
Cody, Benjamin H., Met., Leaching Experiments, Phelps Dodge Corp., Copper Queen Reduction Wks., Douglas, Ariz.		'27
Cody, Frank W., Foreman, International Lead Refin. Co.....	East Chicago, Ind.	'27
Coe, Herbert W., Manufacturer of Brass.....	Waterbury, Conn.	'29
Coe, Ira Judson, Cons. Engr.....	364 14th St., Oakland, Cal.	'03
Coe, John A., Mfr. Pres., The American Brass Co.....	414 Meadow St., Waterbury, Conn.	'23
Coffey, George T.....	64 Santa Clara Ave., Oakland, Cal.	'14
Coffey, George W., Yukon Gold Co.....	Ampang, Selangor, F. M. S.	'18
Coffey, J. L. B., Eagle Pass Lumber Co.....	Del Rio, Tex.	'24
Coffey, Robert C., Min. Engr.....	Prairie City, Iowa.	'22
†Coffin, H. Jackson, Statistical Engr., Mine Engrg. Dept., Inspiration Cons. Copper Co.,	Inspiration, Ariz.	'27
Coggeshall, George W., Research Lab., S. D. Warren Co.....	Cumberland Mills, Me.	'15
Coghill, Robert Webb, Engr., M. W. Kellogg & Co.....	Jersey City, N. J.	'26
Coghill, William H., Met., U. S. Bureau of Mines.....	Rolla, Mo.	'24
Cohen, E. H. A., Cons. Min. Engr., The Rand Club, Johannesburg, Transvaal, South Africa.		'94
Cohen, Eldana Whitman.....	Address Wanted.	'28
†Cohen, Fred W., V.P., Metal & Thermit Corp.....	120 Broadway, New York, N. Y.	'18

Cohen, Julius M., Cons. Min. Engr., Canadian Pacific Express Bldg., Montreal, Que., Canada.	'16
Cohen, Louis.....228 W. Irvington Pl., Denver, Colo.	'01
Cohen, Maxwell B.....62 Chatterton Ave., White Plains, N. Y.	'13
Cohn, Arthur A., Jr., Pet. Engr., Humble Oil & Refin. Co.....Shreveport, La.	'28
Coke, John McBrien, Pet. Geol.....c/o John H. Wilson, Box 187, Golden, Colo.	'28
Colbath, James Sollitt, Benguet Cons. Min. Co.....Baguio, Benguet, P. I.	'23
Colbert, Clarence L., Met.....15 Vista Ave., Elizabeth, N. J.	'17
Colburn, C. Lorimer.....C. A. Johnson Bldg., 509 17th St., Denver, Colo.	'08
Colcord, Eugene L., 2nd V.P. & Engr., Colcord Coal Co.....Montcoal, Raleigh Co., W. Va.	'20
Colcord, F. F., V.P., U.S.S. Lead Refinery, Inc.....57 William St., New York, N. Y.	'05
Cole, Arthur A., Min. Engr., Temiskaming & Northern Ontario Railway, Cobalt, Ont., Canada.	'02
Cole, David, Min. Engr.....Mills Bldg., El Paso, Tex.	'05
Cole, Frank, Supt., Phosphate Plant, American Copper Min. Co.....Anaconda, Mont.	'22
Cole, John Thomas.....Box 574, Henryetta, Okla.	'18
Cole, Robert J., Min. Engr. & Geol.....Box 1583, Jerome, Ariz.	'20
Cole, T. F., Mining.....1230 Oakland Ave., Pasadena, Cal.	'90
Coleman, Bertram D.....1315 Walnut St., Philadelphia, Pa.	'95
Coleman, Milton W., Chief Engr., Virginia District, Oliver Iron Min. Co., Virginia, Minn.	'21
Coleman, W. B., Cons. Met. W. B. Coleman & Co., Mulford Bldg., 15th & Wallace Sts., Philadelphia, Pa.	'26
Coles, H. O., Chem., International Smelt. Co.....Miami, Ariz.	'14
+Coleston, C. E., Supt., Belridge Oil Co.....McKittrick, Cal.	'28
Coley, Glenn, Met., Power Sales Dept., Detroit Edison Co., 2000 2nd Ave., Detroit, Mich.	'21
Collbran, Arthur H., Min. Engr.....2904 Avalon Ave., Berkeley, Cal.	'05
Colley, Bernard T., Met. Engr.....Cerro de Pasco Copper Corp., La Oroya, Peru.	'88
Collier, A. J., Geol., U. S. Geological Survey.....Washington, D. C.	'21
Collingwood, Clemens B.....1792 S. Main St., Stratford, Conn.	'27
Collingwood, Douglas M., Pet. Geol. & Tech., Sun Oil Co.....Box 953, Dallas, Tex.	'21
Collins, Charles H.....1 W. 54th St., New York, N. Y.	'20
Collins, Edwin J., Cons. Min. Engr., V.P., Calumet & Arizona Min. Co.....Calumet, Mich.	'09
Collins, Francis W., Cons. Engr.....452 Lexington Ave., New York, N. Y.	'03
Collins, Frank W., Mech. Engr.....1425 Cabrillo Ave., Burlingame, Cal.	'19
Collins, George E., Min. Engr.....307 Boston Bldg., Denver, Colo.	'00
Collins, J. W.....2955 Collingwood Ave., Detroit, Mich.	'18
Collins, Lewis Robert, Mine Mgr. & Min. Engr., Laughlin Coal Co., Reynoldsville, W. Va.	'28
+Collins, Maurice William, Jr., Sales Mgr., Maloney Oil & Mfg. Co., 141 Meridian St., Scranton, Pa.	'25
Collins, Percy Horace.....c/o Mrs. Inglis, Springfield, St. Day, Cornwall, England.	'24
Collins, Robert F., Geol., Dept. of Geol., Smith College.....Northampton, Mass.	'24
Collins, Thomas H.....Vista del Arroyo Hotel, Pasadena, Cal.	'28
Collins, Wallace H., Pet. Engr., Shell Pet. Co.....Mayo Bldg., Tulsa, Okla.	'29
Collinson, Vincent A., Student, Texas School of Mines.....El Paso, Tex.	'27
Collord, George L., The Shenango Furnace Co., H. W. Oliver Bldg., Box 1106, Pittsburgh, Pa.	'01
Colman, Murray N., General Delivery.....Los Altos, Santa Clara Co., Cal.	'22
Colony, R. J., Asst. Prof. of Geol., Columbia University.....New York, N. Y.	'19
Colquhoun, James.....31 Ferndale, Tunbridge Wells, England.	'98
Coltrin, Wallace A., Min. Engr., P. D. Corp.....Box 2865, Bisbee, Ariz.	'28
Colville, John H., Min. Engr., Anglo-Chilean Nitrate Corp., c/o Anglo-Chilean Consolidated Nitrate Corp., Casilla 17, Tocopilla, Chile.	'28
Colvocoresses, George M., Min. Engr., Gen'l Mgr., Southwest Metals Co., Humboldt, Ariz.	'07
Colwell, Donald L., Met., Stewart Die Casting Corp.....4535 Fullerton Ave., Chicago, Ill.	'27
Colyar, Louis S., Operator, Iron Mines.....James Bldg., Chattanooga, Tenn.	'85
Comess, Samuel, Min. Engrg., U. S. Gov't, Mississippi Flood Control, U. S. Revetment Party, Fleet No. 7, Hickman, Ky.	'29
Comins, Dennis, Pet. Engr., Anglo-Persian Oil Co., Naval & Military Club, 94 Piccadilly, London, W.1, England.	'29
Comins, Waldo H., Local Mgr., St. Louis Smelt. & Refin. Works of National Lead Co., St. Francois, Mo.	'13
Comstock, Charles Worthington, Cons. Engr.....395 Riverside Drive, New York, N. Y.	'00
Comstock, Elting H., Prof., School of Mines, Univ. of Minnesota.....Minneapolis, Minn.	'15
Comstock, George F., Met. Engr., Titanium Alloy Mfg. Co.....Niagara Falls, N. Y.	'18
Comstock, Gregory Jamieson, Dir. of Research, Firth-Sterling Steel Co.....McKeesport, Pa.	'27
Comstock, John R., Asst. Gen'l Mgr., The Buffalo Union Furnace Co.....Buffalo, N. Y.	'20
Comstock, William O., Min. Engr.....54 Dudley St., Brookline, Mass.	'26
Conant, Henry D., Supt., Calumet & Hecla Smelt. Works.....Hubbell, Mich.	'88
Concklin, Bert M., Chief Engr., Arthur Iron Min. Co.....Hibbing, Minn.	'18
Condit, D. Dale, Western Gulf Oil Co.....1221 Subway Terminal Bldg., Los Angeles, Cal.	'21
Cone, John J., Met. Engr., Pres., Robert W. Hunt & Co., The Dodge Bldg., 53 Park Place, New York, N. Y.	'20

Congdon, Edward C., Min.	807 Lonsdale Bldg., Duluth, Minn.	'14
Conley, W. A., Min. Engr., Cia. Minera Asarco, S. A.	Charcas, S. L. P., Mexico.	'18
Conaway, Marshall B., Kenmont Coal Co.	Jeff, Ky.	'25
Connell, H. R., Research Engr., General Electric Co.	Schenectady, N. Y.	'19
Conner, Eli Taylor, Min. Engr., Rooms 1202-1204 Union National Bank Bldg.,	Scranton, Pa.	'92
Conover, Charles Boice, Asst. Chief, East Oxide Dept., New Jersey Zinc Co. of Pa.,	Palmerton, Pa.	'29
Conover, Julian Darst, Sec., American Zinc Institute.	27 Cedar St., New York, N. Y.	'20
Conrad, Charles S., Charge, Val. & Appraisal Dept., Mattison, Davey & Winters,	1203 Niels Esperson Bldg., Houston, Tex.	'25
Conroy, Edward H., Acid Plant, Tennessee Copper Co.	Copperhill, Tenn.	'24
Conroy, Raymond S., School of Mines, Univ. of Arizona.	Tucson, Ariz.	'29
Constantine, Charles H., Supt. of Transportation, Hudson Coal Co.	Scranton, Pa.	'19
Constantinescu, Michel N., Min. Engr., Member of Board of Directors of Creditul Minier,	etc., 75 Bulevardul Bratianu, Bucharest, Romania.	'21
†Conway, Karl B., Asst. to V.P., Gulf Cos.	Pittsburgh, Pa.	'28
Conway, Martin J., Fuel Engr., Lukens Steel Co.	Coatesville, Pa.	'23
Cook, Cash I., Supt., Consolidated Coppermines Corp.	Kimberly, Nev.	'23
Cook, Charles W., Prof. of Economic Geol., Univ. of Michigan,	Natural Science Bldg., Ann Arbor, Mich.	'20
Cook, Edward H., Min. Engr.	Apt. 19, Culiacan, Sin., Mexico.	'96
Cook, Frederick S., Cons. Min. Engr., Sec. & Sales Mgr., McCracken-Ripley Co.,	61-67 Albina Ave., Portland, Ore.	'07
Cook, Henry Edward, Supt., The Portsmouth By-Product Coke Co.,	Box 1013, Portsmouth, Ohio.	'26
Cook, Junius Ford.	Whitney Point, N. Y.	'23
Cook, Spencer Nye, Asst. Gen'l Mgr., Fresno Unit, The Mexican Corp.,	Fresnillo, Zac., Mexico.	'18
Cook, W. Lorrain, Min. Engr.	The Wyoming, Washington, D. C.	'17
Cook, Walter E., Chem. & Met., Camden Forge Co.	Camden, N. J.	'18
Cooke, C. M., Open Hearth Supt., Commonwealth Steel Co.	Granite City, Ill.	'26
Cooke, Henry M. A., Min. Engr.,	5, St. Mary's Square, Bury St. Edmunds, Suffolk, England.	'01
Coolbaugh, Melville F.	1700 Maple St., Golden, Colo.	'18
†Cooley, J. W., Purchasing Agent, National Meter Co.	299 Broadway, New York, N. Y.	'18
Coolidge, E. B., Mgr., Oil & Gas, Hardrock Oil Co.	425 Ford Bldg., Great Falls, Mont.	'20
Coolidge, Marshall H., Jr., Sales Engr., Sullivan Machinery Co.,	837 Equitable Bldg., Denver, Colo.	'27
Coolidge, William Henry, Lawyer.	50 Congress St., Boston, Mass.	'14
Coon, J. Edward, Asst. Fdry. Met., Packard Motor Car Co.	Detroit, Mich.	'24
†Coones, Samuel D., Min. Engr., Inspiration Cons. Copper Co.	Inspiration, Ariz.	'27
Cooney, Daniel Connolly, Jr.	Tequiquiapan, Qro., Mexico.	'24
Cooper, C. E., Asst. Chem., Lehigh Coal & Navigation Co.	Lansford, Pa.	'26
Cooper, Edward N., Jr.	O'okiep, Namaqualand, S. Africa.	'20
Cooper, Howell C., Chief Engr., Hope Natural Gas Co. & Peoples Natural Gas Co.,	545 William Penn Way, Pittsburgh, Pa.	'27
Cooper, Hugh Lincoln, Cons. Engr., Hugh L. Cooper & Co., Inc.,	101 Park Ave., New York, N. Y.	'06
Cooper, James B., District Mgr., Allis-Chalmers Mfg. Co.,	414 Heard Bldg., Phoenix, Ariz.	'17
Cooper, Lloyd D., Gen'l Mgr., E. J. Longyear Co.	710 Security Bldg., Minneapolis, Minn.	'17
Cooper, M. D., Asst. Gen'l Supt., Hillman Coal & Coke Co.,	2300 First National Bank Bldg., Pittsburgh, Pa.	'10
Cooper, William H., Mill. Engr., Mexican Min. Dept., American Smelt. & Refin. Co.,	1112 Mills Bldg., El Paso, Tex.	'17
†Cope, Warren S., Jr., Min. Engr., Majestic Collieries Co.	Majestic, Ky.	'28
†Copeland, Clinton M., Dist. Supt., Comar Oil Co.	Marland, Okla.	'27
†Copeland, F. W., V.P., Sullivan Machinery Co.	400 N. Michigan Ave., Chicago, Ill.	'17
Copp, William Whipple, Pet. Engr., Marland Oil Co. of California,	417 So. Hill St., Los Angeles, Cal.	'22
Corbet, E. B., V.P. & Gen'l Mgr., Corlite Corp.	122 E. 42nd St., New York, N. Y.	'15
Corbett, Clifton S., Geol., The Gulf Oil Co.	21 State St., New York, N. Y.	'17
†Corbett, Francis X.	90 Pewabic St., Houghton, Mich.	'27
†Corbett, James I., Engr., Lake St. John Power & Paper Co., Ltd.,	511 Drummond Bldg., Montreal, Que., Canada.	'23
Corbett, William J., Sec. & Mgr., Steel Founders' Society of America,	511 Magee Bldg., Pittsburgh, Pa.	'18
Corbin, J. Ross, Cons. Engr.	257 S. 44th St., Philadelphia, Pa.	'11
Corbould, Wm. H., Mount Isa Mines, Ltd.	via Duchess, North Queensland, Australia.	'92
Corbus, J. Parker.	Box 123, Los Gatos, Cal.	'96
Cordry, Cletus D.	Drawer 737, Fort Worth, Tex.	'23



Corey, C. R., Asst. Prof. of Met., College of Mines, Univ. of Washington.....	Seattle, Wash.	'19
Corey, William E.....	25 Broadway, New York, N. Y.	'94
Corfield, Reginald W. G., Met.....	Woden, Eaton Grove, Swansea, Wales.	'06
Corkill, F. W., Supt., Pacific Coast Borax Co.....	Death Valley, Cal.	'21
Corkran, Wilbur S., Engr. & Contractor.....	Box 74, Millburn, N. J.	'20
Corless, C. V., Min. Engr., Gen'l Consultant, The Mond Nickel Co., Ltd., Coniston Pl., Tillsonburg, Ont., Canada.		'08
Corless, George B., Humble Oil & Refin. Co.....	Houston, Tex.	'16
Cormack, William W.....	1621 Grove Ave., Richmond, Va.	'24
Cornelissen, Johannes, Salcedo Hermanos.....	Apt. 89., Barranquilla, Colombia.	'14
Cornelius, John Wesley.....	Pennsylvania Ave., Ext., Irwin, Pa.	'24
Cornell, Irwin Hewlett, V.P. & Sales Mgr., St. Joseph Lead Co., 250 Park Ave., New York, N. Y.		'15
Cornell, Russell T., Min. Engr., Dept. Mgr., Exploration Dept., St. Joseph Lead Co. 250 Park Ave., New York, N. Y.		'02
Corner, Douglas C., Min. Engr. & Pres., St. Louis Power Shovel Co., 322 Chemical Bldg., St. Louis, Mo.		'20
Cornett, Denver B., Coal Operator.....	1118 Starks Bldg., Louisville, Ky.	'23
Corning, Frederick G., Cons. Min. Engr., Suite 1634, 16th Floor, 50 Broad St., New York, N. Y.		'77
Corp, Clifford, Mechanical Designer.....	Box 73, Warren, Ariz.	'16
Corre, Herschell A., Student, Pennsylvania State College.....	State College, Pa.	'29
†Corrin, John B., V.P. & Gen'l Mgr., Hope Natural Gas Co., 545 William Penn Way, Pittsburgh, Pa.		'22
Corry, Andrew V.....	Mereton College, Oxford, England.	'26
Corry, Arthur V., Min. Engr., M., Harper-Macdonald Co., Min. Engrs., 22 W. Granite St., Box 23, Butte, Mont.		'97
Corse, William Malcolm, Cons. Met.....	810 18th St. N.W., Washington, D. C.	'14
Corson, Michael G., Cons. Engr.....	34-36 76th St., Jackson Heights, L. I., N. Y.	'28
Cortelyou, Arthur P., Min. Engr.....	850 Beverly Dr., E. San Gabriel, Cal.	'19
Cortright, Edgar M., Min. Engr. & Gen'l Mgr., Hastings Fuel Co.....	Hastings, Pa.	'22
Corwin, Frank R., Mgr., Nichols Copper Co.....	Maspeth P.O., Laurel Hill, L. I., N. Y.	'13
Coryell, H. N., Instructor in Geol., Columbia Univ.....	New York, N. Y.	'21
Cosh, Arthur Davis, Works Mgr., Messrs. H. J. Enthoven & Sons, Ltd., Upper Ordnance Wharf, Rotherhithe St., S.E.16, London, England.		'21
Costa, John Herbert, Min. Engr., Horne Copper Corp.....	Noranda, Que., Canada.	'27
Coste, E. F., Geol., Pet. Tech., Eugene Coste & Co., 410 Royal Bank Bldg., Toronto, Ont., Canada.		'22
Coste, Eugene, Min. Engr., Eugene Coste & Co., 410 Royal Bank Bldg., Toronto, Ont., Canada.		'87
Costello, J. C., Asst. Sales Mgr., The Giant Powder Co. Cons., Crocker First National Bank Bldg., San Francisco, Cal.		'26
Cothern, Leland I., Asst. Prof., School of Mines, Univ. of Alabama.....	University, Ala.	'23
†Cottee, Clifford H. F.....	50 Lenox Ave., East Orange, N. J.	'26
†Cotter, Joseph J., V.P., Pan American Pet. & Transport Co., 120 Broadway, New York, N. Y.		'23
Cottingham, Kenneth, Engr., Columbia Engrg. & Mngmt. Corp., 99 N. Front St., Columbus, Ohio.		'19
†Cotton, Joseph Bell, Attorney & Counsellor-at-Law, 40th Floor, 225 Broadway, New York, N. Y.		'20
Cottrell, Frederick G., Dir., Fixed Nitrogen Research Lab., United States Dept. of Agriculture, American Univ., Friendship Station, Washington, D. C.		'12
Couch, Jamison E., Shell Pet. Corp.....	Box 126, Earlsboro, Okla.	'25
Couch, Robert W.....	Box 4, Iron Mountain, Mo.	'27
Couch, W. L., Student, Missouri School of Mines.....	Rolla, Mo.	'29
Couldrey, Frank S., Min. Engr., Asst. Mgr., Minas de Rio Tinto, Ltd., Provincia de Huelva, Spain.		'06
†Coulson, Donald C., Sales Engr., Oliver United Filters, Inc., 565 Washington St., Chicago, Ill.		'28
Coulter, Don M., Min. Engr., Cortez-King Brand Mines Co.....	Picher, Okla.	'25
Coulter, William J., Gen'l Supt., Climax Molybdenum Co.....	Climax, Colo.	'25
Coumerilh, William, Mine Operator.....	Mullan, Idaho.	'95
Counselman, Theodore B., The Dorr Co.....	333 N. Michigan Ave., Chicago, Ill.	'14
Countryman, Milton E., Asst. Lab. Engr., Missouri State Highway Commission, Jefferson City, Mo.		'25
Coupal, J. S., Cons. Engr., Mgr. for Arizona-Eastern Gold Mines Co.....	Octave, Ariz.	'18
Courtier, William Henry, Asst. Geol., Midwest Refin. Co.....	Box 240, Denver, Colo.	'28
Courtney, C. F., Civ. & Min. Engr., The Sulphide Corp., Ltd., Finsbury House, Blomfield St., London, E.C.2, England.		'97
Cousin, Robert.....	Box 66, c/o Jos P.O., Northern Nigeria, Africa.	'27

†Cousins, George T., Mech. Engr., Ingersoll-Rand Co.....	11 Broadway, New York, N. Y.	'15
Countant, J. Gould, Cons. Fuel Engr.....	14 E. 60th St., New York, N. Y.	'27
Coutts, John, Met., Charles Ruwolt Pty., Ltd.....	Victoria St., Richmond, Vic., Australia.	'24
Coutts, William G. B., Pet. Min. Engr., Nederlandsche Koloniale Petroleum Maatschappij,	Blora, Java, D.E.I.	'27
Covault, F. W., Dist. Supt. of Production, Amerada Pet. Corp.,	1204 Fort Worth National Bank Bldg., Fort Worth, Tex.	'27
Cowan, Roysel John, Met. Engr., Surface Combustion Co.....	2375 Dorr St., Toledo, Ohio.	'20
Cowan, W. A., Asst. Chief Chem., National Lead Co.....	105 York St., Brooklyn, N. Y.	'18
Cowan, William W., The Dorr Co.....	536 Miners Bank Bldg., Wilkes-Barre, Pa.	'17
Cowans, Frederick, Min. Engr.....	1349 2nd Ave., Salt Lake City, Utah.	'05
Cowles, H. O., Analyst, U. S. Bureau of Mines, Univ. of Utah.....	Salt Lake City, Utah.	'26
Cowpland, C. C., Supt., Hercules Powder Co.....	Ishpeming, Mich.	'21
Cowpland, Elliott M., Tech. Service Rep., Hercules Powder Co.....	Joplin, Mo.	'28
Cox, Benjamin Burton, Geol.....	Room 417, 26 Broadway, New York, N. Y.	'29
†Cox, Daniel J., Met., American Copper Products Corp.....	Elizabeth, N. J.	'20
Cox, Gordon Leland, Houston Collieries Co.....	Kimball, W. Va.	'26
Cox, H. M., Sheet & Strip Met., Central Alloy Steel Corp.....	Massillon, Ohio.	'21
Cox, Herbert B.....	410 Main St., Winchester, Mass.	'04
Cox, John Raffles.....	503 Baird Rd., Merion, Pa.	'22
Cox, Roy L.....	7047 Penn Ave., Pittsburgh, Pa.	'25
Cox, Samuel F., Diamond Power Specialty Corp.....	Oakland & Caniff Sts., Detroit, Mich.	'23
Cox, Thomas, Cons. Engr.....	463 Ellita Ave., Oakland, Cal.	'01
Cox, W. Ray, Min. Engr., Mineral Examiner, U. S. General Land Office,	616 Post Office Bldg., Portland, Ore.	'03
Cox, W. Rowland, Cons. Min. Engr.....	120 Broadway, New York, N. Y.	'03
Cox, William J.....	Colorado National Bank Bldg., Denver, Colo.	'93
Cox, Winfred W., Min. Engr., Peabody Coal Co.....	Kenvir, Ky.	'22
Coy, H. A., Supt. of Mines, American Zinc Co. of Tenn.....	Mascot, Tenn.	'16
Coyle, Francis B., Research Lab., International Nickel Co.....	Bayonne, N. J.	'20
Coyle, Theodore Russell, American Smelt. & Refin. Co....	Apt. 63, Chihuahua, Chih., Mexico.	'28
Crabtree, E. H., Jr., Met., Canam Metals, Inc.....	Picher, Okla.	'27
*†Crabtree, Benjamin Cole, Prof., Pet. Engrg., Louisiana State Univ.....	Baton Rouge, La.	'29
Crafts, Walter, Union Carbide & Carbon Research Labs., Inc.,	Thompson Ave. & Manly St., Long Island City, N. Y.	'26
Craig, Albert B., Gen'l Mgr., Chartiers Oil Co....	808 Columbia Bank Bldg., Pittsburgh, Pa.	'21
Craig, Charles Dewey, Moctezuma Copper Co.....	Pilares de Nacozari, Son., Mexico.	'26
†Craig, E. J., Gen'l Rep., Andes Copper Min. Co.....	Casilla 83 D, Santiago, Chile.	'25
†Craig, John J., Min. Engr., Met., Mines Experiment Station, Univ. Minnesota,	Minneapolis, Minn.	'16
Craig, Samuel Edward.....	Box 874, Tooele, Utah.	'26
Craighead, S. J., Min. Engr., National Min. Co.....	Morgan, Pa.	'27
Craigie, W. H., Valuation Engr., Income Tax Unit, Metals Sec., Engrg. Div.,	Washington, D. C.	'21
†Crampton, Donald K., Met.....	Marion, Conn.	'20
Crampton, Frank A., Cons. Min. & Met. Engr., Mgr., Orient Mine & Service Mgr.,	Inter-Commercial Trading Co., Box 20, Canton, China.	'15
Crampton, Theodore H. M., Chief Engr. & Asst. to Pres., Servised Products Corp.,	419 S. Prairie Ave., Elmhurst, Ill.	'23
Crandall, Hector, Pres., Anadarko Western Oil Co....	2002 Philtower Bldg., Tulsa, Okla.	'19
Crandall, Roderic, Cons. Pet. Engr., Crandall & Osmond....	17 Battery Pl., New York, N. Y.	'12
Crane, Clinton H., Pres., St. Joseph Lead Co.....	250 Park Ave., New York, N. Y.	'15
Crane, Earl B.....	397 E. 47th St. N., Portland, Ore.	'17
Crane, G. Allen, Min. Engr.....	Bridge River, B.C., Canada.	'04
Crane, Guy W., Cons. Geol.....	304 Dooly Block, Salt Lake City, Utah.	'14
†Crane, Theron I., Pres., New York Zinc Co., Inc.....	1114 Widener Bldg., Philadelphia, Pa.	'92
Crane, Walter R., Senior Min. Engr., U. S. Bureau of Mines.....	Tucson, Ariz.	'00
Crankshaw, Hugh M.....	Caspidge House, Finstall, Bromsgrove, Worcestershire, England.	'12
Cranston, Robert E., Min. Engr., Gen'l Mgr., South American Gold & Platinum Co.,	Room 1824, 61 Broadway, New York, N. Y.	'99
Crass, Maurice F., Jr.....	14723 Drexmore Rd., Shaker Village, Cleveland, Ohio.	'26
Craven, George Warren.....	951 Caledonia St., Butte, Mont.	'26
Craver, Frank S., Oil Producer & Pet. Geol., Craver & Greene,	Suite 305, Wright Bldg., Tulsa, Okla.	'21
Crawford, A. M., Met., United Verde Copper Co.....	Clarkdale, Ariz.	'23
Crawford, Chauncey A., Dev. & Research Dept., International Nickel Co.,	67 Wall St., New York, N. Y.	'21
Crawford, E. Perry, Ventures, Ltd.....	The Pas, Man., Canada.	'27
Crawford, George G., Pres., Tenn., Coal, Iron & R.R. Co.....	Birmingham, Ala.	'00
Crawford, H. E., Min. Engr., Gen'l Mgr., Cinco Minas Co.,	Room 722, Pacific Finance Bldg., 621 S. Hope St., Los Angeles, Cal.	'02

For explanation of symbols, see page 5.

Crawford, John T.....	Box 432, West Newton, Pa.	'26
Crawford, R. D., Prof. of Mineralogy & Petrology, Univ. of Colorado.....	Boulder, Colo.	'18
Crawford, S. Le Roy.....	2603 4th St., Port Arthur, Tex.	'25
Crawford, William, Asst. Supt., Island Creek Coal Co.....	Whitmans, W. Va.	'23
Crawford, William E., Mill Supt., Compania Beneficiadora de Pachuca, S. A., Apt. 1, Pachuca, Hgo., Mexico.		'16
Crawhall, John S., Min. Engr., Charge, Cementation, The Dravo Contracting Co., Pittsburgh, Pa.		'29
Crease, Herbert H., Min. Engr.....	Santana, near Honda, Colombia.	'10
Creden, William L., Min. Engr., Pres., Creden Mines Corp.....	Butte, Mont.	'14
Creglow, Loran A., U. S. Smelt. Refin. & Min. Co.....	56 Amherst St., Cambridge, Mass.	'26
Creerar, George.....	715 Broadway Arcade Bldg., Los Angeles, Cal.	'16
Crewe, Leonard C., Min. & Met. Engr., V.P., David Baker, Inc., 1011 Chestnut St., Philadelphia, Pa.		'03
Crichton, Andrew B., Min. Engr.....	U. S. Bank Bldg., Johnstown, Pa.	'10
Crichton, Walter G., Gen'l Mgr., Meadow Creek Coal Co.....	Crichton, W. Va.	'19
Critchett, O. A., Chem. & Assayer.....	210 San Francisco St., El Paso, Tex.	'27
Crites, Joe, Combustion Engrg. Corp.....	200 Madison Ave., New York, N. Y.	'21
Crittenden, Z. T., Heat Treat. Engr., Oakland Motor Car Co.....	Pontiac, Mich.	'14
Croasdale, Stuart, Cons. Min. & Met. Engr.....	718 Symes Bldg., Denver, Colo.	'18
Crocard, Francis H.....	1305 Niazuma Ave., Birmingham, Ala.	'25
Crockard, Frank H., Pres., Woodward Iron Co.....	Woodward, Ala.	'95
Crockett, Robert E., Asst. Mgr. of Mines, Ringwood Co.....	Ringwood Manor, N. J.	'23
Croft, Harry P., Asst. Met., Chase Cos., Inc.....	Waterbury, Conn.	'29
Croft, Leland R., Midwest Refin. Co.....	Craig, Colo.	'26
Croll, Harry V., Engr. Salesman, Traylor Engrg. & Mfg. Co.....	Allentown, Pa.	'20
**Cromack, F. Davis.....	Brownsville, Tex.	'29
Cromwell, J. C., Gen'l Mgr., The Steel Sanitary Co.....	Alliance, Ohio.	'20
Cromwell, Robert H., Asst. Gen'l Mgr., Minas de Matahambre, Matahambre, Prov. de Pinar del Rio, Cuba.		'03
Crone-Aamot, Olav, Research Engr., Guggenheim Bros. Labs., 3771 10th Ave., New York, N. Y.		'29
Crook, Theo. H., Land & Lease Div., Standard Oil Co. of California, 225 Bush St., San Francisco, Cal.		'20
Crook, Welton J., Cons. Engr., Prof. of Met., Stanford Univ., Box 985, Stanford University, Cal.		'12
Crooker, Ralph, Cons. Engr.....	Acton, Mass.	'81
Crookston, A. W., Min. Engr.....	38 Grosvenor Gardens, London S. W. 1, England.	'80
Crosby, Irving B., Cons. Geol.....	6 Beacon St., Boston, Mass.	'28
Crosby, Ralph W., Supt., Balatoc Min. Co.....	Box 249, Baguio, Benguet, P. I.	'24
Cross, Edward O.....	1904 Windermere St., East Cleveland, Ohio.	'06
Cross, Wilbur L., Jr., Supt., Haddock Min. Co.....	Pottsville, Pa.	'14
Crossley, George C., Min. Engr., Pres. & Gen'l Mgr., United Clay Mines Corp., Prospect & Oakland Sts., Trenton, N. J.		'17
Croston, John J.....	Room 1612, 57 William St., New York, N. Y.	'15
Crouse, C. S., Head, Dept. of Min. & Met. Engrg., Univ. of Kentucky, Min. Bldg., Lexington, Ky.		'28
Crowder, John Pearson, Engrg. Dept., Southwestern Engrg. Corp., 1221 Hollingsworth Bldg., Los Angeles, Cal.		'26
Crowe, John J., Engr. in charge, Apparatus Research & Dev., Air Reduction Co., 100 Forrest St., Jersey City, N. J.		'18
Crowell, Benedict, Min. Engr., Chairman of Board of Directors, The Crowell & Little Construction Co., 930 Hanna Bldg., Cleveland, Ohio.		'93
Crowfoot, Arthur, Phelps Dodge Corp.....	Box 556, Morenci, Ariz.	'13
Crowle, Percy J., Min. Engr.....	Oorgaum, Kolar Gold Field, S. India.	'28
Crowley, Arthur J.....	334 N. Normandie Ave., Los Angeles, Cal.	'24
Crowley, Roland V.....	Cornwall, Pa.	'27
Croxton, David T., Min. Engr., V.P., The Trumbull Cliffs Furnace Co. & Cleveland-Cliffs Iron Co., 1460 Union Trust Co. Bldg., Cleveland, Ohio.		'93
Croze, W. W. J.....	910 Wolvin Bldg., Duluth, Minn.	'21
Crum, B. M., Chief Chem. & Met., The Stanley Works.....	New Britain, Conn.	'28
Crum, E. Jefferson, Bethlehem Steel Co.....	619 "C" St., Sparrows Point, Md.	'29
Crumbaugh, John J., Caterpillar Tractor Co.....	50 Church St., New York, N. Y.	'19
Crutchfield, Graham Peterson, Chief Engr. & Supt., Gasoline & Constr. Dept., Roesser & Pendleton, Inc., Fort Worth, Tex.		'23
Cruz-Monclova, Hector Edmundo.....	12 rue Gay-Lussac V, Paris, France.	'28
Cudworth, James R., Asst. Prof., Min. Engrg., School of Mines, Univ. of Alabama, University, Ala.		'20



Cullen, Joseph F.	171 Highland St., Worcester, Mass.	'16
Cullinan, Craig F., V.P., American Republics Corp.	25 West 43rd St., New York, N. Y.	'26
†Cullinan, Joseph S.	20th Floor, Petroleum Bldg., Houston, Tex.	'21
Cullity, E. R., Southwestern Engrg. Corp. of Canada Ltd.,	350 Bay St., Toronto, Ont., Canada.	'20
Cullum, J. Barlow	East Drive, Sewickley, Pittsburgh, Pa.	'91
Culver, Harold E., Geol., Head, Dept. of Geol., The State College of Washington,	Pullman, Wash.	'21
Cumings, W. L., Geol. & Min. Engr.	418 High St., Bethlehem, Pa.	'01
Cummings, Alvin M., Gen'l Supt., Witherbee, Sherman & Co., Inc. Mineville, Essex Co., N. Y.		'18
Cummings, Lloyd A., Met., Chief Engr., Marlin-Rockwell Corp.,	402 Chandler St., Jamestown, N. Y.	'19
Cummings, William N.	R. D. 3, Box 233, Orange, Cal.	'93
Cummins, William N., Min. Engr., York Lynn Manor	Overbrook, Pa.	'10
Cundy, H., Mgr., East Asiatic Co., Ltd.	Takuapa, Siam, via Penang, S. S.	'26
Cunningham, Alexander, Cons. Engr.	2 Rector St., New York, N. Y.	'27
Cuniff, Bernard, Pres., E. G. Spink Co.	Indianapolis, Ind.	'12
Cunningham, George H., Electrolytic Zinc Engr., American Smelt. & Refn. Co.,	1212 Mills Bldg., El Paso, Tex.	'15
Cunningham, J. B., Prof., Dept. of Met., Univ. of Arizona	Tucson, Ariz.	'18
Cunningham, Noel, Weston Dodson & Co.	Bethlehem, Pa.	'21
Cunningham, Parker H.	306 N. Jefferson St., New Castle, Pa.	'05
Cunningham, Roy H.	800 First National Bank Bldg., Huntington, W. Va.	'21
Cunningham, Walter H., Cons. Engr.	800 First National Bank Bldg., Huntington, W. Va.	'14
Cunyngham, F. E., Min. Engr., Mgr., Coal Mines, Pulaski Iron Co.	Eckman, W. Va.	'07
Cuno, Charles W., Cons. Engr., Industrial Bureau of the Industrial Club of St. Louis,	511 Locust St., St. Louis, Mo.	'21
Curley, Michael, Gen'l Supt., New Cornelia Copper Co.	Ajo, Ariz.	'17
Curley, William P., Supt., Companhia Meridional de Mineracao,	Lafayette, Minas Geraes, Brazil.	'20
Curran, M. D., Pres., St. Louis Gas & Coke Corp.	1502 Telephone Bldg., St. Louis, Mo.	'27
Currens, Warren W., Chem., Passaic Cons. Water Co.	Box 208, Little Falls, N. J.	'07
Currie, David, Cons. Min. & Met. Engr.	230 Caxton House East, London, S. W. 1, England.	'17
Currie, Robert D., Safety Engr., Pittsburgh Coal Co.	1018 Oliver Bldg., Pittsburgh, Pa.	'27
Currie, Walter, Cons. Min. Engr.	62 Nevern Square, Earls Court, London, S. W. 5, England.	'96
Curry, J. B.	5910 7th Ave., Los Angeles, Cal.	'22
Curry, J. E., Sec. & Treas., Apache Powder Co.	Benson, Ariz.	'17
Curtis, Algernon Lewin, Cons. Engr. & Mineralogist, Westmoor Lab.,	Chatteris, Cambridgeshire, England.	'20
Curtis, Fred S., The W. S. Tyler Co.	Cleveland, Ohio.	'17
Cusac, Wilbur Ray, Asst. Met. Engr., Dodge Bros.	Detroit, Mich.	'22
Cushing, Daniel, Cons. Engr., Specialist, Non-Ferrous Metals,	143 State St., Boston, Mass.	'14
Cushman, C. W., Mine Supt., San Luis Min. Co.	c/o Cordova y Cia, Dimas, Sin., Mexico.	'17
†Custer, George A., Apprentice, American Steel & Wire Co., American Works,	Cleveland, Ohio.	'28
†Custer, Merlin E., Elec. Engr., Pacific States Lumber Co.	Selleck, Wash.	'21
Cutler, Willard W., Jr., Geol., Cypress Pet. Co. of California,	215 W. 6th St., Los Angeles, Cal.	'18
†Cutter, Lloyd Austin, Sales Engr., A. P. Green Fire Brick Co.	Mexico, Mo.	'27
†d'Ablaing, Philip R., Chem., Anaconda Copper Min. Co.	Great Falls, Mont.	'25
Daevs, Karl, Supt., Research Dept., Vereinigte Stahlwerke A.-G.,	Breitestrasse 69, Stahlhaus-Sud., Dusseldorf, Germany.	'25
Dahlgren, Paul F.	621 Johnstone Ave., Bartlesville, Okla.	'19
Dahlstrom, Elis, Geol., Asst. Mgr., Swedish American Prospecting Co. of Canada, Ltd.,	12th Floor, 26 Beaver St., New York, N. Y.	'29
Dailey, M. J., Gen'l Mgr., Silver King Coalition Mines Co.,	1015 Kearns Bldg., Salt Lake City, Utah.	'25
Dake, Charles Laurence, Prof. of Geol., Missouri School of Mines & Met.	Rolla, Mo.	'17
Dake, Walter M., 2nd, Cons. Engr. in charge of Sales, Joy Mfr. Co.	Franklin, Pa.	'12
Dakin, Frederick H., Jr., Min. Engr.	2811 Hillside Drive, Burlingame, Cal.	'04
Dalbey, G. E., Met., Supt., Stanley Chemical Co.	East Berlin, Conn.	'17
Dalburg, F. A., Min. Engr.	Montoursville, Pa.	'04
Dale, Floyd	1113 Spring St., Grinnell, Iowa.	'23
†Dalen, Olav, Met., The Dorr Co., Engrs.	Westport, Conn.	'25
†Dallmus, Erwin G., Research Chem., Anaconda Copper Mining Co., Great Falls Reduction	Wks., Great Falls, Mont.	'28
Dalton, Henry G.	20th Floor, Union Trust Bldg., Cleveland, Ohio.	'06
Dalton, Melvin P.	904 Hollingsworth Bldg., Los Angeles, Cal.	'10

Daly, Marcel R., Cons. Min. Engr. & Pet. Geol.....	Securities Bldg., Seattle, Wash.	'17
†Daly, Marcus.....	Room 2401, 551 5th Ave., New York, N. Y.	'19
Daly, William B., Mgr. of Mines, Anaconda Copper Min. Co.,	508 Hennessy Bldg., Butte, Mont.	'15
**Dalzell, R. Carson, Research Met., N. Y. Research Dept., American Smelt. & Refin. Co.,	Perth Amboy, N. J.	'29
DAN, TAKUMA, Director-Gen'l, Mitsui all Combined Interests, Mitsui Gomei Kaisha No.	1-2 Chome, Honcho, Nihonbashi, Tokyo, Japan:	'88
**Dana, Edmund L., Salesman, Meeker & Co., Inc.....	143 Liberty St., New York, N. Y.	'29
Dana, Edward B., Geol.....	Apt. 234, Maracaibo, Venezuela.	'26
Dandois, Charles F., Acting Asst. Supt., (Concentration) Cerro de Pasco Copper Corp.,	Morococha, Peru.	'29
Danford, Mark O., Tax Commissioner, The Midwest Refin. Co.....	Box 1075, Casper, Wyo.	'19
Danforth, George L., Jr., Asst. Gen'l Supt., Illinois Steel Co.,	89th & The Strand, Chicago, Ill.	'20
Daniel, Joseph A., Min. Engr. & Geol.....	Box 152, Accra, Gold Coast Colony, W. Africa.	'17
Daniell, John, Cons. Min. Engr.....	727 W. 7th St., 637 Roosevelt Bldg., Los Angeles, Cal.	'00
Daniels, Joseph, Prof., Min. Engrg. & Met., College of Mines, Univ. of Washington,	Seattle, Wash.	'11
Danielsen, Nils, Tech. Dir. & Mgr., Hellekis Wks.,	Skanska Cemantaktiebolagat, Hellekis, Sweden.	'24
Danley, George E.....	Apt. 9, 1374 Rose Ave., Long Beach, Cal.	'24
†Dannenbergh, Richard Martin, Pet. Engr., Comar Oil Co.....	Marland, Okla.	'21
Danse, L. A., Met., Cadillac Motor Car Co.....	Detroit, Mich.	'19
Darby, E. R., Met., Federal Mogul Corp.....	11031 Shoemaker St., Detroit, Mich.	'26
Darby, George M., Asst. Mgr., Dev. Dept., The Dorr Co., 247 Park Ave., New York, N. Y.		'21
D'Arcy, A. I., Min. Engr., Gen'l Mgr., Goldfield Deep Mines Co. of Nevada...	Goldfield, Nev.	'16
Darlington, Wayne, Cons. Min. Engr. & Met.....	Tarpon Springs, Fla.	'95
Darnell, J. L., Jr., United Verde Copper Co.....	111 Broadway, New York, N. Y.	'27
Darnell, James L., V.P., New England Oil Refin. Co.....	Fall River, Mass.	'20
Darney, Robert P., Student, School of Mines, Univ. of Oklahoma.....	Norman, Okla.	'23
Dartnell, W. W.....	1 Locust Ave., Lennox, Wheeling, W. Va.	'27
Darton, N. H., Geol., U. S. Geological Survey.....	Washington, D. C.	'94
Daszynski, Stephen Witold, Pet. Geol.....	6 Kremerowska, Krakow, Poland.	'27
Daughtrey, Hinton N., Observer, Met. Dept., Bethlehem Steel Co.....	Sparrows Point, Md.	'28
Daveler, Erle V., Met. Engr., Gen'l Mgr., Butte & Superior Min. Co.,	Box 1708, Butte, Mont.	'09
Davenport, Edmund S., Met., U. S. Steel Corp., Research Lab.....	Kearny, N. J.	'21
Davenport, Frank B.....	Miners Bank Bldg., Wilkes-Barre, Pa.	'19
Davenport, John, Min. Engr., Pres. & Mgr., Franklin Mineral Products Co., Franklin, N. C.		'16
Davey, T. S., Gen'l Mgr., Alexandria Gold Mines, Ltd.,	350 Bay St., Toronto, Ont., Canada.	'17
David, Harold E.....	318 Brook St., Peckville, Pa.	'26
Davidson, A. P., Asst. Division Foreman, Moctezuma Copper Co.,	Pilares de Nacozari, Son., Mexico.	'22
Davidson, George M., Industrial Engr., Chicago & Northwestern Ry. Co.,	226 W. Jackson Blvd., Chicago, Ill.	'81
Davidson, Harold O., Supt., Dept. of Timberlands, Oliver Iron Min. Co.,	Iron Mountain, Mich.	'15
Davidson, Lyndall P., Supt., Zinc Oxide & Electrolytic Zinc Plants, Giesche Spolka	Akcyjna, Ul. Podgorna 4, Katowice, G.Sc., Poland.	'17
Davidson, Otto C., Gen'l Supt., Iron Mines, Oliver Iron Mining Co...Iron Mountain, Mich.		'91
Davidson, T. R., V.P., Canadian Crown Cork Co., Ltd.,	680 Albert St., Box 493, Montreal, Que., Canada.	'19
Davies, Eric, Min. Engr., St. John Del Rey Min. Co., Ltd.,	Morro Velho, Raposos, E.F.C.B., Minas Geraes, Brazil.	'24
†Davies, Fred A., Geol., The California Co.....	Box 2410, Denver, Colo.	'16
Davies, George M., Mine Contractor, Lehigh Coal & Navigation Co.,	Lansford, Carbon Co., Pa.	'15
Davies, J. V., Cons. Engr., Pres., Jacobs & Davies, Inc.....	30 Church St., New York, N. Y.	'17
†Davila, Marino, Min. Engr.....	Apt. 875, Madrid, Spain.	'18
Davis, Alvan L., Steel & Non-Ferrous Met., & Research Engr., Scovill Mfg. Co.,	Waterbury, Conn.	'21
Davis, Carl R., Cons. Min. Engr., Technical Dir., Anglo-American Corp. of S. A., Ltd.,	4 London Wall Bldgs., Finsbury Circus, London, E.C. 2, England.	'99
Davis, Charles, Cons. Engr., Pres., Various Corp.....	Bass River, Cape Cod, Mass.	'00
Davis, Charles B., Sales Mgr., C. B. Davis Engrg. Co.,	339 Brown Marx Bldg., Birmingham, Ala.	'17
Davis, Charles Hollister, Asst. Met., American Brass Co.....	Waterbury, Conn.	'22
Davis, E. F., V.P., Shell Oil Co.....	430 Higgins Bldg., Los Angeles, Cal.	'20
Davis, E. W., Supt., Mines Experiment Station, Univ. of Minnesota....	Minneapolis, Minn.	'17

# 38 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Davis, Eugene Tyler, V.P., The Tyler Tube & Pipe Co.	Washington, Pa.	'21
Davis, F. H., Engr., Federated Metals Corp.	St. Charles St. & Ave. L, Newark, N. J.	'27
Davis, Fenelon F., Geol., Standard Oil Co. of California, Room 1300, 225 Bush St., San Francisco, Cal.		'28
Davis, Frank W., Met. Engr., International Combustion Engrg. Corp., 191 Doremus Ave., Newark, N. J.		'23
Davis, Gilbert C., Gen'l Mgr., The Colorado & Utah Coal Co., & The Colony Coal Co., Mt. Harris, Colo.		'29
Davis, Harry, Asst. Supt., Open Hearth 3, Lehigh Plant, Bethlehem Steel Co., Bethlehem, Pa.		'28
Davis, Harry T., Curator of Geol., North Carolina State Museum.	Raleigh, N. C.	'21
†Davis, Henry G., J. P. Morgan & Co.	23 Wall St., New York, N. Y.	'24
Davis, Howard E., Cons. Min. Engr.	732 United States National Bank Bldg., Denver, Colo.	'28
Davis, Ira F., Chairman, Allotment Commission, The Chesapeake & Ohio Ry. Co., Room 211, C. & O. Passenger Sta., Huntington, W. Va.		'22
Davis, J. C., 4th V.P., American Steel Foundries.	410 N. Michigan Ave., Chicago, Ill.	'98
Davis, Jefferson, Cons. Engr.	947 Oliver Bldg., Pittsburgh, Pa.	'20
Davis, John A., Min. Engr., U. S. Bureau of Mines.	Washington, D. C.	'25
Davis, John H., Min. Engr.	1155 10th St., Douglas, Ariz.	'15
Davis, John M., Min. Engr., Clarkson Coal Min. Co.	St. Clairsville, Ohio.	'20
Davis, Laurence R., Quarry Supt., Santa Cruz Portland Cement Co.	Davenport, Cal.	'28
Davis, Leverett, Min. Engr.	Cinebar, Wash.	'18
Davis, Lewis K.	71 Broadway, New York, N. Y.	'93
†Davis, Paul H., Pres., Paul H. Davis & Co.	37 S. La Salle St., Chicago, Ill.	'20
Davis, Philip W., Research Engr., Edgeworth Plant, Richards & Co.	Malden, Mass.	'25
Davis, Ralph E., Engr.	Suite 1710, Union Bank Bldg., Pittsburgh, Pa.	'17
Davis, Reuben W., Min. Engr., Supt., Cannel Coal Co.	Dolores, Webb Co., Tex.	'16
Davis, Sidney H., Mgr., Smith, Davis & Co.	Baxter Springs, Kans.	'16
Davis, Thomas, Pet. Engr.	3211 35th Ave S., Seattle, Wash.	'17
†Davis, Thornton, Pet. Geol., Bass & Dillard.	610 Waggoner Bldg., Wichita Falls, Tex.	'17
Davis, Trevelyan, Transitman, Lago Pet. Corp.	Apt. 172, Maracaibo, Venezuela, S. A.	'25
Davis, W. F., Pres. & Gen'l Mgr., St. Louis & O'Fallon Coal Co.	St. Louis, Mo.	'23
Davis, Walter W., Lawyer & Mine Operator, 415 Lexington Ave. at 43rd St., New York, N. Y.		'12
Davison, G. C., Pres., Bed Rock Pet. Co.	56 State St., New London, Conn.	'25
Davison, George L., Min., V.P. & Mgr., Southern Ferro Alloys Co., 21st & Chestnut Sts., Chattanooga, Tenn.		'97
Davison, William, Colliery Supt., Coal Brook Colliery, The Hudson Coal Co., Carbondale, Pa.		'19
Davoll, David P., Student, Yale Univ.	New Haven, Conn.	'28
Daw, John H., Min. Engr., Pickands-Mather Co., Mather Collieries, Mather, Green Co., Pa.		'26
Dawson, Eugene H., Cons. Engr.	26 Beaver St., New York, N. Y.	'19
Dawson, Thomas W., V.P., H. C. Frick Coke Co.	1316 Carnegie Bldg., Pittsburgh, Pa.	'29
†Day, Alfred Edward, Pet. Geol., The Indo-Burma Pet. Co., Ltd., Box 132, Rangoon, Burma, India.		'25
†Day, Edward B., Pres., Hydrotator Co.	40 S. Church St., Hazleton, Pa.	'21
Day, Franklin K., Min. Engr., The Consolidation Coal Co.	Coalwood, W. Va.	'17
Day, Harry L.	Day Bldg., Wallace, Idaho.	'15
†Day, Henry Lawrence, Asst. Mgr., Hercules Min. Co.	Box 408, Wallace, Idaho.	'23
Day, Jerome J., Min., Pres. & Gen'l Mgr., Tamarack & Custer Cons. Min. Co., Day Bldg., Wallace, Idaho.		'16
Day, Roger O., Met., Western Electric Co., Inc.	Hawthorne Sta., Chicago, Ill.	'25
Day, Roland B.	Address Wanted.	'25
Day, William H., Jr., Mfg. and Mining.	Dubuque, Iowa.	'00
Dayhoff, R. W., Anglo-Chilean Cons. Nitrate Corp.	Casilla 17, Tocopilla, Chile.	'28
Deacon, Ralph W., Cons. Engr.	42 De Witt Rd., Elizabeth, N. J.	'14
Dean, A. L., Met.	1033 St. Patrick St., Victoria, B. C., Canada.	'96
Dean, Dudley S., Treas., Keweenaw Land Assn., Ltd., Newport Land Co., 87 Milk St., Boston, Mass.		'15
Dean, Reginald Scott, Met. Div., U. S. Bureau of Mines.	Washington, D. C.	'26
Dean, Robert L., Min. Engr.	727 McKinley Ave., Kellogg, Idaho.	'27
Dean, Walter A., Student, Rensselaer Polytechnic Institute.	Troy, N. Y.	'26
Deane, E. G., Min. Engr.	Box 1437, St. Petersburg, Fla.	'16
De Arozena, Joe, Resident Engr., Arizona Highway Dept.	Phoenix, Ariz.	'29
de Arrieta, Charles, Chief Engr., Walker Min. Co.	Spring Garden, Cal.	'29
Deason, B. W., Member of Firm, Black & Deason, Assayers & Chemists, 165 S. West Temple St., Salt Lake City, Utah.		'29
Deaver, Melvin L., Engr., Gypsy Oil Co., Drawer G.	Seminole, Okla.	'28
Deavitt, W. J.	339 S. Sycamore Ave., Los Angeles, Cal.	'15
de Batz, Rene, Cons. Engr.	Address Wanted.	'95
De Beque, G. R., Min. Engr., Mgr., Colorado-Mexico Min. Co.	Silverton, Colo.	'21
DeBorde, Leon, Min. Engr.	Troy, Mont.	'28

For explanation of symbols, see page 5.



DeCamp, W. V., Min. Mgr., Gen'l Supt., United Verde Copper Co.	Jerome, Ariz.	'16
Dechant, Frederick H., Cons. Engr.	Dechant Bldg., Reading, Pa.	'20
Decker, Edward J., Pres. & Mgr., Paul S. Reeves & Co., 1415 Catharine St., Philadelphia, Pa.		'18
Decker, Everett Judd, Asst. Supt., Maryd Colliery, Hazle Brook Coal Co.	Maryd, Pa.	'23
Decker, Harold, Prod. Engr., Tidal Oil Co.	Tulsa, Okla.	'23
Decker, H. D., Mine Supt., U. S. Gypsum Co.	Plasterco, Va.	'26
Decker, Stiles Morrow, Sec., Sheldon Machinery Corp.	15 Park Row, New York, N. Y.	'29
Dedman, James Edwin, Jr., Asst. Engr. of Mines, American Zinc Co. of Tenn.,	Mascot, Tenn.	'25
Dee, L. T., Pres., Ideal Coal Co.	First National Bank Bldg., Ogden, Utah.	'23
Deeds, James R. H., Student, Univ. of Pittsburgh.	Pittsburgh, Pa.	'23
Deegan, Charles J., Valuation Engr. c/o Geol. Dept., Marland Oil Co., Ponca City, Okla.		'23
Deegan, John, Mine Engr.	4035 Brighton Ave., Los Angeles, Cal.	'09
Deetrick, James W., Mgr., Republic Iron & Steel Co.,	826 Pennsylvania Ave., Youngstown, Ohio.	'15
Degnan, Robert E., Inspector, Dept. of Water Supply, Gas & Electricity,	Queens, Municipal Bldg., Long Island City, N. Y.	'27
de Golyer, Anthony G., Pres., Metals Refin. Corp.	25 W. 43rd St., New York, N. Y.	'24
de Golyer, Everette, Pet. Geol.	65 Broadway, New York, N. Y.	'14
de Graaff, Antonius, Chem. Engr., Library Dept., Philips Glowlampworks, Ltd.,	Eindhoven, Netherlands.	'23
DeGraw, Cullen J.	Box 865, Seminole, Okla.	'23
de Hann, W., Min. Engr., Gen'l Mgr., Mangani Mine, Mijnbouw Maatschappij, "Aequator,"	Mangani, West Coast of Sumatra, N. E. I., Via Pajakombo.	'21
de Hora, M. Herrera, Cons. Engr.	106 East 17th St., New York, N. Y.	'08
de Ibarreta y Uhagon, Luis.	Minas de Castillo de las Guardas, Sevilla, Spain.	'22
Deichmiller, Henry, Colliery Engr., The Hudson Coal Co.	Scranton, Pa.	'20
Deike, George H., Pres. & Treas., Mine Safety Appliances Co.,	Braddock Ave. & Thomas Blvd., Pittsburgh, Pa.	'20
De Kalb, Courtenay.	829 N. Tyndall Ave., Tucson, Ariz.	'92
de La Bouglise, Robert.	7, rue Gounod, Paris 17e, France.	'22
de la Garza Cardenas, J. M., Pet. Engr., Inspector, Mexican Bureau of Petroleum,	Apt. 181, Tampico, Tamps., Mexico.	'27
Delaloye, A. F., Supt., Arkansas District, Western Coal & Min. Co.	Fort Smith, Ark.	'21
Delamater, G. R., Fuel Engr., W. S. Tyler Co.	Cleveland, Ohio.	'19
de Landero, Carlos F., Min. Engr., Geol.	2717 Kenwood Ave., Los Angeles, Cal.	'94
Delano, Frederic A., Cons. Engr., Receiver, Supreme Court of United States,	902 Hibbs Bldg., Washington, D. C.	'86
Delano, Lewis A., St. Joseph Lead Co.	Bonne Terre, Mo.	'14
de la Puente, Jose R., Min. Engr., Supt., Negociacion Minera Lizandro A. Proano,	Tamboraque, Peru.	'29
del Giudice, Guy Richard M., Lecturer in Min., School of Mines, Columbia Univ.,	New York, N. Y.	'23
de Lima, Oscar.	155 E. 42nd St., New York, N. Y.	'19
DeLong, Berton Henry, Met., Carpenter Steel Co.	43 Exeter St., Reading, Pa.	'18
Delprat, G. D., "Keynsham," Mandeville Crescent, Toorak, Melbourne, Vic., Australia.		'90
del Rio, Salvador, Met., Engr. of Mines, U. S. Metals Smelt. & Refin. Co., Carteret, N. J.		'23
del Solar, Carlos Buckley, Student, Harvard Univ.	20 Straus Hall, Cambridge, Mass.	'29
DeLury, J. S., Dept. of Geol., Univ. of Manitoba.	Winnipeg, Man., Canada.	'30
de Medio Serrano, Ruperto, Asst. Chief. Chem., Pyrites Co., Ltd.	Wilmington, Del.	'24
Demmler, Albert W., Met., Vanadium Corp. of America.	Bridgeville, Pa.	'23
Demorest, Dana J., Prof. of Met., The Ohio State Univ.	Columbus, Ohio.	'19
Dempster, Arthur L., Min. Engr.	Route 3, Box 227, Seattle, Wash.	'25
Denham, Clarence W., Min. Engr., High Splint Coal Co.	High Splint, Ky.	'26
Denis, Theophile C., Min. Engr., Quebec Bureau of Mines.	Quebec, Que., Canada.	'20
Denison, A. R., Div. Geol., Amerada Pet. Corp.,	1510 W. T. Waggoner Bldg., Box 1348, Fort Worth, Tex.	'26
Denison, Charles L., Mine Owner.	111 Broadway, New York, N. Y.	'16
Denman, Heber, Cons. Engr., Pres., Paris Purity Coal Co.	Paris, Ark.	'01
Denning, C. O., Production Engr., The Pure Oil Co.	Box 1007, Fort Worth, Tex.	'29
Dennis, Richard C.	Ashland, Wis.	'26
Dennis, William B., V.P. & Mgr., Carlton Cons. Lumber Co., Pres., Shawmada Lumber Co., Carlton, Ore.		'03
Denny, Edward H., Dist. Min. Engr., U. S. Bureau of Mines,	428 Post Office Bldg., Denver, Colo.	'26
Denny, G. A.	Box 1046, Durban, Natal, S. Africa.	'16
Denny, Henry Samuel, Pres. & Cons. Engr., Mentor Exploration & Development Co., Ltd.,	423 Brock Bldg., 200 Bay St., Toronto, Ont., Canada.	'05
Denny, James John, Mill Supt., McIntyre-Porcupine Mines, Ltd.	Schumacher, Ont., Canada.	'17
Denton, Fred W., Cons. Engr.	Houghton, Mich.	'92

For explanation of symbols, see page 5.

Denton, Frederick Warner, Jr., Granby Cons. Min. Smelt. & Power Co., Ltd., Copper Mountain, B. C., Canada.	'28
Denton, T. C., Min. Engr., Danli Co.....Room 1950, 120 Broadway, New York, N. Y.	'22
De Pencier, H. P., The Dome Mines, Ltd.....So. Porcupine, Ont., Canada.	'14
†Deppé, W. P., Pres., Deppé Motors Corp.....151 Church St., New York, N. Y.	'21
de Raay, Herman.....Linnaeusparkweg 42, Amsterdam, Holland.	'28
Derby, Edwin L., Jr., Chief Geol., The Cleveland-Cliffs Iron Co.....Ishpeming, Mich.	'29
Deringer, B. W., Inspector of Mines, N. Y. Central Railroad Co., Spangler, Cambria Co., Pa.	'20
Deringer, D. C., Jr., Min. Engr., Mill Supt., The British Metals Corp. of Canada, Ltd., Montauban, Portneuf Co., Que., Canada.	'22
Dern, George H., Governor of Utah.....State Capitol, Salt Lake City, Utah.	'14
Derrier, Louis H., Master Mech., Laclede Steel Co.....Alton, Ill.	'21
de Saullés, Charles A. H.....425 E. 51st St., New York, N. Y.	'12
Deschacht, Jean, Asst. Mgr., Union Minière Du Haut Katanga, 3 Rue de la Chancellerie, Brussels, Belgium.	'20
†Desgrey, Charles W., Min. Engr., United States Gypsum Co.....Plasterco, Va.	'28
Deshayes, Ernest V., Mine Mgr., American Asphalt Association.....Dragon, Utah.	'14
Deshler, George O., Min. Engr.....33 N. Second St., Bangor, Pa.	'13
Desloge, Firmin V., Min. Engr., V.P. & Supt., Desloge Cons. Lead Co.....Desloge, Mo.	'03
†de Sousa, Caio Luis P., Mgr. of Iron Foundry, Cast Iron Pipe Manufacturing, Rua Libero Badaro 42, Sao Paulo, Brazil.	'29
†Desparois, L. J., Jr., Tech. Service Dept., St. Louis Gas & Coke Corp., 1502 Telephone Bldg., St. Louis, Mo.	'27
†Des Rochers, Edward Merrick, Supervisor, House Dept., New River & Pocahontas Cons. Coal Co., Fayetteville, W. Va.	'20
De Stoutz, Edmund, Min. Engr.....7 Av. P. de Rochemont, Geneva, Switzerland.	'00
Dethloff, William Louis.....Box 54, Swarthmore, Pa.	'19
†Detwiler, Paul M., Min. Engr., Asst. Engr., H. H. Metz, Citizens National Bank Bldg., Lansdale, Pa.	'25
†de Uribe-Echebarria, Luis, Engr., Venezuelan Pantepec Co. C. A., Apt. G, Caracas, Venezuela.	'22
Deussen, Alexander, Cons. Geol.....1606 Post Dispatch Bldg., Houston, Tex.	'16
†DeVaney, Fred D., U. S. Bureau of Mines.....Rolla, Mo.	'23
†Devereux, A., Met., Western Electric Co.....Hawthorne Sta., Chicago, Ill.	'21
Devereux, James H., Min. Engr., Wilkens & Devereux.....120 Broadway, New York, N. Y.	'89
Devereux, W. B., Cons. Min. Engr.....120 Broadway, New York, N. Y.	'89
**Devine, John M., Asst. Pet. Engr., U. S. Bureau of Mines.....Bartlesville, Okla.	'20
†DeWald, Lee H., Met. Engr., Western Electric Co.....Chicago, Ill.	'28
de Wendel, Charles, Engr.....56 Avenue Hoche, Paris, France.	'00
de Wendel, Maurice, Maître de Forges, Les Petits-Fils de Francois de Wendel & Cie., 3, Rue Paul-Baudry, Paris (8e), France.	'23
Dewey, George C., Chief Chem. & Assayer, American Smelt. & Refin. Co., East Helena, Mont.	'17
Dewey, W. C., V.P., E. H. & W. C. Dewey Investment Co.....Nampa, Idaho.	'24
†De Witt, Donald S., Gen'l Supt., Holt Hardwood Co.....Oconto, Wis.	'21
De Wolf, Frank W., Chief Geol., Humphreys Corp.....Esperson Bldg., Houston, Tex.	'09
Diamond, Ivan John Annesley, 9-10 Transvaal Bldgs., Cor. Fox & Sauer Sts., Johannesburg, S. Africa.	'28
Diamond, R. W., Gen'l Supt. of Concentration, Cons. Min. & Smelt. Co. of Canada, Ltd., Trail, B. C., Canada.	'18
Diaz, Luis F., Engr. of Mines.....Apt. 69, Cerro de Pasco, Peru.	'15
Dick, J. C., Cons. Min. Engr.....1501 Walker Bank Bldg., Salt Lake City, Utah.	'08
†Dick, J. P., Assayer, Consolidated Min. & Smelt. Co.....Chapman Camp, B. C., Canada.	'26
Dick, James E.....933 12th St., Santa Monica, Cal.	'16
Dick-Cleland, A. F., Nigerian Base Metals, Ltd., P. O. Jos, Northern Nigeria, W. Africa.	'09
Dickenson, E. H., Min. Engr., Special Rep., Ingersoll-Rand Co., Rialto Bldg., San Francisco, Cal.	'14
†Dickerman, Edward D., Chem., Colorado Zinc Lead Co.....Leadville, Colo.	'27
Dickerman, Nelson, Min. Engr., Yuba Associated Engrs., 31 Bishopsgate, London, E. C. 2, England.	'15
Dickerman, William C., V.P., American Car & Fdry. Co.....30 Church St., New York, N. Y.	'12
Dickerson, Roy E.....Apt. 223, Maracaibo, Venezuela.	'24
Dickey, S. E., Civ., Min. & Cons. Engr., Pres., S. E. Dickey & Co., 809 Johnstown Trust Bldg., Johnstown, Pa.	'23
Dickinson, Albert Wright, Gen'l Supt., The Union Pacific Coal Co.....Rock Springs, Wyo.	'14
Dickinson, E. S.....1105 Third Ave., Hibbing, Minn.	'28
Dickinson, H. T., Cons. Engr., Anglo-American Corp. of South Africa, Ltd. & Angola Diamond Co., Box 4587, Johannesburg, Transvaal, S. Africa.	'25
Dickinson, Sheldon J., American Smelt. & Refin. Co.....Omaha, Neb.	'29
†Dickson, William E., Engr., Sun Oil Co.....Beaumont, Tex.	'21
†Dickson, Robert B., Senior Min. Geol. Student, John Jay Hall, Columbia University, New York, N. Y.	'28

Dickson, Robert H., Min. Engr., Mgr., Verde Central Mines, Inc.	Box M, Jerome, Ariz.	'16
†Dickson, Thomas I., Dist. Supt., Caribbean Pet. Co.	Maracaibo, Venezuela.	'24
†Dickson, Walter S., Contracting Engr., Walter S. Dickson & Co.,	90 West St., New York, N. Y.	'18
†Diecks, A. N., Salesman, National Supply Corp.	120 Broadway, New York, N. Y.	'28
Dieffenbach, E. E., Met., Cons. Met., U. S. Metals Refin. Co.,	24 Johnson Ave., Newark, N. J.	'07
Diehl, A. N., V.P., Carnegie Steel Co.	1216 Carnegie Bldg., Pittsburgh, Pa.	'02
Dierker, A. H., Research Engr., Engrg. Experiment Station, Ohio State University,	Columbus, Ohio.	'29
Diescher, Alfred J., Oil Producer, Emerald Oil Co.	State Bank Bldg., Winfield, Kans.	'06
Dietrich, W. F., Assoc. Prof. of Min. Engrg., Stanford Univ.,	Mining Bldg., Stanford University, Cal.	'13
Dietz, Carl F., Cons. & Met. Engr.	298 Linden Ave., Bridgeport, Conn.	'10
Dike, C. F., Mgr., Syndicate-Operating Montreal Mine.	Box 390, Joplin, Mo.	'17
Dillingham, George B., Supt., Morococha Div., Cerro de Pasco Copper Corp.,	Morococha, Peru.	'19
Dillon, John R., Certified Public Accountant, Hayden, Stone & Co.,	Room 811, 25 Broad St., New York, N. Y.	'28
Dillon, John T.	607 Angelus Pl., Venice, Cal.	'14
Dilworth, John B., Cons. Min. Engr., Edward V. d'Invilliers Engrg. Co.,	121 No. Broad St., Philadelphia, Pa.	'05
Dimitriu, T. Ernest, Engr., Technical Mgr. of oilfields, Steaua-Romana Oil Co.,	Campina, Romania.	'29
Dimmick, Frederick D.	1019 Pennsylvania Bldg., Philadelphia, Pa.	'04
Dimmick, Ralph B., Chief Met., Columbia Steel Co.	Butler, Pa.	'20
Dimmick, Shelby D., Min. Engr., V.P. & Gen'l Mgr., Glen Alden Coal Co.	Scranton, Pa.	'16
†Dimock, R. E., Met. Engr.	467 Esplanade, Sydney, N. S., Canada.	'27
Dingwall, W. B. A.	Matchuala, S. L. P., Mexico.	'97
Dinkey, Charles E.	Morewood Gardens, Morewood Ave., Pittsburgh, Pa.	'87
†Dinkey, Charles E., Jr., Curb Market Broker, M. J. Meehan & Co.,	61 Broadway, New York, N. Y.	'25
†Dismukes, J. S., Student, Univ. of Oklahoma, Dept. of Geol.	743 Asp., Norman, Okla.	'29
Dissinger, Earl, Freeport Sulphur Co.	702 Second National Bank Bldg., Houston, Tex.	'20
Disston, William D., V.P., Henry Disston & Sons, Inc.	Tacony, Philadelphia, Pa.	'19
Dix, E. H., Jr., Met., Research Bureau, Aluminum Co. of America.	New Kensington, Pa.	'27
Dixon, A. Faison, Geol. & Pet. Engr., Partner, Brokaw, Dixon, Garner & McKee,	120 Broadway, New York, N. Y.	'11
†Dixon, Augustus M., Min. Engr., Engrg. Dept., San Francisco Mines of Mexico, Ltd.,	San Francisco del Oro, Chih., Mexico.	'25
Dixon, Edward	The Bungalow, Pembroke Ave., Westbrook, Margate, Kent, England.	'22
Dixon, Enslo Smith, Met., The Texas Co.	Port Arthur, Tex.	'25
†Dixon, Harrison I.	510 Franklin St., Palmerton, Pa.	'26
Dixon, James T., Min. Engr.	Homebush, Worcester Rd., Sutton, Surrey, England.	'96
Dixon, Max M., Cons. Min. Engr.	4 Great Winchester St., London, E. C. 2, England.	'22
Dixon, P. St. John	c/o Union Bank of Australia, Ltd., Launceston, Tasmania.	'17
†Dixon, Richard S., Mech. Engr., Moctezuma Copper Co.	Nacozari, Son., Mexico.	'25
Dixon, Samuel, Pres., Price Hill Colliery Co.	Price Hill, W. Va.	'97
Doak, Samuel E., Min. Engr.	135 South Second St., Philadelphia, Pa.	'12
Doane, G. Earl, Cons. Min. Engr.	Poplar Bluff, Mo.	'29
Doane, George Walter, Min., Supt., Sylvanite Gold Mines	Kirkland Lake, Ont., Canada.	'28
Dobbin, C. E., Geol., U. S. Geol. Survey	212 Custom House, Denver, Colo.	'27
Dobbs, Gerald G., Min. Engr., Gen'l Supt., Ore Mines & Quarries, The Tata Iron & Steel Co., Ltd.,	Gorumahisani, via Tatanagar & B. N. Ry., Orissa, India.	'11
Dobrescu, Teodor	75 Bdl. Bratiano, Bucharest, Romania.	'28
Dobson, Chris. G., Foreman, Victoria Mine, Britannia Min. & Smelt. Co.,	Britannia Beach, B. C., Canada.	'13
Dobson, Percy G., Compania Minera de Penoles, S. A.	Campo Morado, Gro., Mexico.	'18
Dodge, Cleveland E., Mining	99 John St., New York, N. Y.	'13
Dodge, D. D., "Coal," Gen'l Supt., W. J. Rainey, Inc.,	Fayette Title & Trust Bldg., Uniontown, Pa.	'20
†Dodge, Henry E., Magma Copper Co.	14 Wall St., New York, N. Y.	'22
Dodge, John Franklin, Prof. of Pet. Engrg., Div. of Pet. Engrg., Univ. of Southern California,	Los Angeles, Cal.	'29
Dodson, Alan C., Pres., Weston Dodson & Co., Inc.	528 N. New St., Bethlehem, Pa.	'21
Dodson, T. M., V.P., Weston Dodson & Co., Inc.	Dodson Bldg., Bethlehem, Pa.	'14
†Dodworth, James R., Jr., Field Engr., Callinan-McKay Exploration Co., Ltd.,	323 Fourth Ave., Pittsburgh, Pa.	'21
Doelle, H. E., Min. Engr., Granby Cons. M. & P. Co.	Anyox, B. C., Canada.	'17
Doerner, Henry A., Met., Assoc. Chem., U. S. Bureau of Mines	Reno, Nev.	'29
Doerr, Kuno, V.P., Madonna Corp.	1, Exchange Place, Jersey City, N. J.	'14



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Doerr, Kuno, Jr., Chem., American Smelt. & Refin. Co.	Garfield, Utah.	'26
Doerr, Philip, Asst. Chem., American Smelt. & Refin. Co.	Tacoma, Wash.	'27
Dolbear, Samuel H., Cons. Engr.	Suite 2843, 17 Battery Pl., New York, N. Y.	'27
†Dold, A. L., Pres., Knox Manufacturing Co.	821 Cherry St., Philadelphia, Pa.	'23
†Dollard, Edward J., Partner, Industrial Engrg. Service Co., 322 Builders Exchange Bldg., Oakland, Cal.	Alma, Colo.	'24
Dollison, James E., Min. Engr.	4740 Balboa St., San Francisco, Cal.	'17
Donald, Phillips B., Cons. Geol.	Eztatlan, Jal., Mexico.	'29
Dolph, Orman P., Mazata y Annexe.	510 Loew's Warfield Bldg., San Francisco, Cal.	'27
Dolton, William E., Asst. Mgr., California Tax Agency,	Wallace, Idaho.	'20
Donahoe, D. G., Min. & Safety Engr., Federal Min. & Smelt. Co.	General Counsel's Office, Bureau of Internal Revenue, Washington, D. C.	'14
Donahoe, Frank T., Min. Engr., Cons. Val. Engr.,	387 East Monta Vista Rd., Phoenix, Ariz.	'20
Donahue, Thomas H.	Bloomington, N. J.	'00
Donald, William, Assayer & Chemist.	Estacion Dimas, Sin., Mexico.	'28
Donaldson, J. G., San Luis Min. Co.	Cleveland, Ohio.	'17
Donaldson, Kenneth Hume, Min. Engr., Case School of Applied Science.	Pachuca, Hgo., Mexico.	'24
Donaldson, W. G., Jr. Engr., Real del Monte y Pachuca.	Société franco-belge de Colonisation ("Financo"), 19 rue de Naples, Rabat, Morocco.	'29
*Donnay, Joseph Desire Hubert, Engr. & Geol.	470 Vanderbilt Ave., Brooklyn, N. Y.	'25
Donnelly, James F., Met. Engr., A. Schrader's Son, Inc.,	Maracaibo Oil Exploration Corp., 14 Wall St., New York, N. Y.	'18
Donnelly, Leonard G., Cons. Geol., V.P.,	Room 553, 11 Broadway, New York, N. Y.	'07
Donnelly, Thomas F., Cons. Min. Engr.	Abbott Rd., Buffalo, N. Y.	'06
Donner, W. H., Pres., Donner Steel Co.	2011 W. T. Waggoner Bldg., Fort Worth, Tex.	'20
Donoghue, David.	Cerro de Pasco Copper Corp., Cerro de Pasco, Peru.	'20
Donoghue, W. B., Asst. Supt., Cerro de Pasco Copper Corp.	Coulter Bldg., Greensburg, Pa.	'24
Donohoe, John P., Pres., Donohoe Coke Co., Potter Coal & Coke Co.,	Medical Arts Bldg., Fort Worth, Tex.	'29
†Donohue, Frank P., Pet. Engr., Southern Crude Oil Co.,	E. J. Longyear Exploration Co., 710 Security Bldg., Minneapolis, Minn.	'17
Donovan, P. W., Min. Engr., Mgr.,	34, Rue Caulaincourt, Paris 18, France.	'96
Dorion, Fernand J., Min. Engr.	Bradford, Pa.	'25
Dorn, Forest D., Pres., Forest Oil Corp.	Lexington Bldg., 247 Park Ave., New York, N. Y.	'01
Dorr, J. V. N., John Scott Medallist, Franklin Inst., 1914; Met., Pres., The Dorr Co., Park-	624-626 Scranton Life Bldg., Scranton, Pa.	'11
Dorrance, Charles, Cons. Min. Engr.	1005 Carson St., S.S., Pittsburgh, Pa.	'28
†Dorsey, Theodore	1770 E. 45th St., Cleveland, Ohio.	'27
Dorticos, Philip, Cleveland Wire Wks.	58 Garfield St., Cambridge, Mass.	'27
†Doten, Robert K.	Skouriotissa, Cyprus.	'21
†Douch, William, Min. Engr. & Surveyor, Cyprus Mines Corp.	511 Fifth Ave., New York, N. Y.	'15
Dougan, Lee D., Sales Engr., American Cyanamid Co.	Box 84, Leon, Kans.	'27
Dougherty, Bernard William, Pipe Line Supt., Sinclair Corp.	Box E. 5299, St. Johns, Newfoundland.	'27
Dougherty, Ellsworth Y.	United Verde Extension Min. Co., Room 2174, 233 Broadway, New York, N. Y.	'18
†Douglas, Archibald, Dir. & Gen'l Counsel,	The U. S. Smelt. Exploration, S. A., Apt. 3, Pachuca, Hgo., Mexico.	'20
Douglas, C. B. E., Field Engr.,	Clarkdale, Ariz.	'23
Douglas, George M., Cons. Engr., United Verde Copper Co.	Southern Rhodesia Base Metals Corp., Box 43, Sinoia, S. Rhodesia, S. Africa.	'28
†Douglas, James, Asst. Experimental Flotation Pilot Plant,	Apt. 398, Maracaibo, Venezuela.	'19
Douglas, James M., Mgr., Union National Pet. Co.	Douglas, Ariz.	'10
Douglas, James S., Miner & Banker.	Room 537, House Office Bldg., Washington, D. C.	'21
Douglas, Lewis W., Congressman from Arizona,	99 John St., New York, N. Y.	'92
Douglas, Walter, Pres., Phelps Dodge Corp.	Creighton Mine, Ont., Canada.	'27
†Douglass, Edward F., Jr., International Nickel Co. of Canada, Ltd.,	Casilla 162, Trujillo, Peru.	'06
Douglass, Ross E., Gen'l Mgr., Northern Peru Min. & Smelt. Co.,	Kimberly, Nev.	'14
Douglass, W. C.	1012 U. S. Bank Bldg., Johnstown, Pa.	'20
Dovey, C. C., Pres., Cambria Fuel Co.	49 Federal St., Boston, Mass.	'23
Dow, Lothrop, Stone & Webster Engrg. Corp.	St. Joseph Lead Co., Hereculaneum, Mo.	'30
Dowd, William C., Met., Charge Sintering,	Washington, D. C.	'18
†Dowdell, R. L., Div. of Met., Bureau of Standards.	36 North Country Club Dr., Phoenix, Ariz.	'16
Dowell, Grant H., Cons. Met. Engr.	St. John del Rey Min. Co., Ltd., Morro Velho, Raposos, E. F. C. B., Minas Geraes, Brazil.	'27
Downe, Arthur Henry, Mine Captain,		

For explanation of symbols, see page 5.

Downes, Frank A., Min. Engr., Dev. Engr., The Dorr Co., 247 Park Ave., New York, N. Y.	'16
Downing, F. E. .... 906 Truxillo Ave., Houston, Tex.	'20
Downing, Thomas F., Jr., Cons. Min. Engr. .... 5320 Walnut St., Philadelphia, Pa.	'20
Downs, Charles R., Potts Metallist, Franklin Inst., 1922; Grasselli Metallist, S. of C. I., 1926; Chem. Engr., Weiss & Downs, 50 E. 41st St., New York, N. Y.	'24
Downs, Fletcher G., Min. Engr. .... Box 46, Bryson City, N. C.	'14
Drabelle, John Mitchell, Mech. & Elec. Engr., Iowa Railway & Light Co., Cedar Rapids, Iowa.	'26
Dragusanu, Juliu, Student, School of Mines, Univ. of Pittsburgh. .... Pittsburgh, Pa.	'28
Drake, Frank ..... 79 Milk St., Boston, Mass.	'91
Drake, Noah F. .... Fayetteville, Ark.	'98
†Drapeau, Joseph E., Jr., Research Engr., Research Dept., Nichols Copper Co., Laurel Hill, L. I., N. Y.	'26
Draper, Fred W. .... 2115 Cowper St., Palo Alto, Cal.	'02
Draper, Marshall D., Pres., American Refined Tin Co. .... North Point, Hong Kong, China.	'18
Draper, Robert M. .... 1417 North 48th St., Seattle, Wash.	'00
Drefahl, Louis Charles, Research Engr., Operating Dept., Grasselli Chem. Co., 1400 Guardian Bldg., Cleveland, Ohio.	'20
Dresser, Carl K., Pres., Dresser Oil Co. .... 502 World Bldg., Tulsa, Okla.	'19
Dresser, Clarence G., Min. Engr., Mill Supt., St. Louis Smelt. & Refin. Works, National Lead Co., St. Francois, Mo.	'08
Dresser, John A., Min. Geol., Room 909, Bank of Nova Scotia Bldg., Montreal, Que., Canada.	'14
Drew, Charles G. .... Address Wanted.	'27
Drew, Charles V., 2nd V.P., Cerro de Pasco Copper Corp., Bank of America Bldg., 44 Wall St., New York, N. Y.	'06
†Drier, Roy Ward, Research Rontgenologist, Michigan College of Min. & Tech., Houghton, Mich.	'29
DRINKER, H. S. .... Merion Station, Montgomery Co., Pa. Founder	
†Driver, Frank L., Jr., Pres., Driver-Harris Co. .... Harrison, N. J.	'20
Drucker, Arthur Eilert, Dean, School of Mines & Geology, Washington State College, Pullman, Wash.	'20
Druding, F. D., Federal Min. & Smelt. Co. .... Wallace, Idaho.	'17
Drullard, H. R. .... Box 1455, Stanford University, Cal.	'18
†Drummond, Peter R., The Northern Peru Min. & Smelt. Co. .... Casilla 162, Trujillo, Peru.	'21
Drummond, T. R., Mgr., Pinto Valley Co. .... Box 1567, Miami, Ariz.	'99
Drury, C. W., Mgr., Deloro Research Labs. .... 521 Bloor Bldg., Toronto, Ont., Canada.	'17
Drury, Walter Maynard, Min. Engr., Gen'l Mgr. Min. Dept., American Smelt. & Refin. Co., 1112 Mills Bldg., El Paso, Tex.	'04
†Drushel, S. G., Pres., Jackson County State Bank. .... Edna, Tex.	'22
Drybrough, John. .... 302 Confederation Life Bldg., Winnipeg, Man., Canada.	'21
Dryer, Thomas B., Asst. Gen'l Supt. of Mines, Sloss Sheffield Steel & Iron Co., 906 American Trust Bldg., Birmingham, Ala.	'19
Dub, George D., Min. Engr. .... Bartlett, Inyo Co., Cal.	'18
†Dubi, Joseph H. .... 24 State St., New York, N. Y.	'27
DuBois, W. F. .... 2957 Dearborn St., Seattle, Wash.	'27
Duce, James Terry, Cons. Geol., The Texas Co. .... 17 Battery Pl., New York, N. Y.	'18
Duck, Frank J. G., Asst. Publicity Mgr., Worthington Pump & Machinery Corp., Harrison, N. J.	'28
Dudley, Harry C., Min. Engr. .... 704 Lonsdale Bldg., Duluth, Minn.	'08
Dudley, Morris B., Min. Operator, Katherine Treasure Vault. .... Kingman, Ariz.	'20
†Duff, Grover J., Charge of Leasing Dept., Utah Delaware Mine. .... Bingham Canyon, Utah.	'28
Duffield, W. W., Civ. & Min. Engr. .... Harlan, Ky.	'06
Dufresne, Alphonse O., Director, Quebec Bureau of Mines, Parliament Bldgs., Quebec City, Que., Canada.	'29
Duggan, E. J., Mill Supt., Kennecott Copper Corp. .... Kennecott, Alaska.	'24
Dugger, Robert Rolling, Engr., Shell Oil Co. .... Long Beach, Cal.	'24
Duggleby, A. F., Min. Engr., Newmont Min. Corp. .... 14 Wall St., New York, N. Y.	'17
Dumitrescu, Victor, Gen'l Supt., Production Dept., Steaua Romana Oil Co., Campina, Romania.	'29
Dumont, John M. .... 950 Logan St., Denver, Colo.	'82
Du Moulin, W. L., Gen'l Supt., Calumet & Arizona Min. Co., New Cornelia Mines. Ajo, Ariz.	'14
Dunbar, Douglas MacDonald, Min. Engr., Chile Exploration Co. .... Chuquicamata, Chile.	'11
Dunbar, Frank B., Gen'l Supt., Mather Collieries. .... Mather, Greene Co., Pa.	'27
Duncan, H. S., Min. Engr., Old Dominion Copper Min. & Smelt. Co. .... Globe, Ariz.	'16
Duncan, Kenneth, Supt., Pickands, Mather & Co., Dunwoody Mine; Orwell Iron Co., Dunwoody Mine, Chisholm, Minn.	'20
Duncan, William G., Jr., Supt., W. G. Duncan Coal Co. .... Greenville, Ky.	'20
Dunclinson, George, Jr., Mgr., Fuel Dept., Norfolk & Western Railway Co. Bluefield, W. Va.	'19
Dunham, Lewis E. .... 2281 Tudor Drive, Cleveland, Ohio.	'90
Dunkin, D. D., Min. Engr., Pres. & Mgr., Silica Products Co., Inc. .... Guion, Ark.	'06

# 44 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Dunkle, G. F., Min. Engr., Womelsdorff & Dunkle.....	Philipsburg, Pa.	'05
Dunn, H. Earl, Met., Asst. to V.P., Vanadium Corp. of America.....	Bridgeville, Pa.	'21
Dunn, Jack William, Asst. Geol., Hudson Bay Marland Oil Co., Eyremore, Alta., Canada.		'27
Dunn, Robert H., Min. Engr., Bunker-Hill & Sullivan Min. & Concentrat. Co., Kellogg, Idaho.		'26
Dunn, Theodore S., Min. Engr., Prof. of Geol., Georgia School of Tech.....	Atlanta, Ga.	'14
Dunn, W. R., Asst. to Pres., & Mfg. Dir., Vulcanite Portland Cement Co., Phillipsburg, N. J.		'06
Dunn, William, Mech. Engr., Sherritt Gordon Mines Ltd., Room 1802, Sterling Tower, Toronto, Ont., Canada.		'21
Dunshee, B. H.....	900 Santa Barbara Rd., Berkeley, Cal.	'90
Dunster, C. B.....	Oceanside, Cal.	'07
Duparc, Louis, Prof. de Mineralogie et Petrographie, Ecole de Chimie, Geneva, Switzerland.		'20
du Pont, T. C., Explosives, E. I. du Pont de Nemours Co.....	Wilmington, Del.	'97
Durell, Charles Terry.....	2551 17th St., N. W., Washington, D. C.	'03
Durfee, E. W., State Supervisor of Trade & Industrial Education.....	Carson City, Nev.	'07
Durham, B. W., Mine Mgr., The Lonely Reef Gold Min. Co., Ltd., Lonely Mine, Southern Rhodesia, Africa.		'25
Durham, Edward B., Min. Engr., Comstock & Wescott, Inc.....	Niagara Falls, N. Y.	'00
†Durkee, Anna E., Director, Business Mgr., Dardanelles Amalgamated Mines, Inc., Suite 1016, 1123 Broadway, New York, N. Y.		'28
Durkee, Frank W., Prof of Chem., Tufts College.....	Tufts College, 57, Mass.	'11
Duschak, L. H., Chem. & Met. Engr., 1114 Hobart Bldg., 582 Market St., San Francisco, Cal.		'17
†Dutt, Monindra Nath, Asst. Mgr., Jamadoba Colliery, Tata Iron & Steel Co., Ltd., Jealgora P.O., District Manbhum, B.&O., India.		'24
Dutton, C. B., Pres., Besser Sales Co.....	53 W. Jackson Blvd., Chicago, Ill.	'16
Dutton, Dewey A., Asst. Min. Engr., U. S. Bureau of Mines, 428 Post Office Bldg., Denver, Colo.		'18
Duval d'Adrian, Alexander L., Illinois Glass Co.....	Alton, Ill.	'20
Duvall, Glenn Thomas, Plant Shift Foreman, Anglo-Chilean Cons. Nitrate Corp., Casilla 17, Tocopilla, Chile.		'24
Dwight, Arthur S., Min. & Met. Engr., Pres., Dwight & Lloyd Cos., 75 West St., New York, N. Y.		'85
Dwight, E. W., Treas., Kingston Coal Co.....	Philadelphia, Pa.	'04
†Dwyer, Robert E., Gen'l Auditor, Anaconda Copper Min. Co., Room 1801, 25 Broadway, New York, N. Y.		'23
Dye, Robert E., Min. & Met. Engr., Vipond Consolidated Mines, Ltd., Timmins, Ont., Canada.		'15
Dyer, Bert W., Min. Engr., District Min. Supervisor, U. S. Geol. Survey, 316 Federal Bldg., Salt Lake City, Utah.		'19
Dyer, Frederick C., Min. Engr., Asst. Prof. of Min., Min. Bldg., Univ. of Toronto, Toronto, Ont., Canada.		'14
Dyer, H. H., Min. Engr.....	919 W. 63rd Pl., Los Angeles, Cal.	'17
Dykema, William P., Mgr., Southern Gasoline Co.....	Ranger, Tex.	'21
Dynan, John L., Gen'l Supt., Belmont-MacNeill Mine, Tonopah Belmont Dev. Co., Palo Verde, Ariz.		'15
Dyrenforth, Donald, Engr., The Dorr Co.....	824 Cooper Bldg., 1009 17th St., Denver, Colo.	'14
Dyson, Thomas I., Met., Australian Inst. of Min. & Met., 374 Little Collins St., Melbourne, Vic., Australia.		'97
Eadie, John, Supt., Dolomite Coal Mine.....	Dolomite, Ala.	'29
Eager, Frank J., Asst. Supt., Froid Mine, International Nickel Co. of Canada, Ltd., Box 1728, Sudbury, Ont., Canada.		'21
Eagle, Henry Y., Union Miniere du Haut Katanga.....	25 Broadway, New York, N. Y.	'20
Eagles, Homer M., Engr., Standard Oil Co. of N. J., Room 1067, 26 Broadway, New York, N. Y.		'22
Eames, L. B.....	769 Fillmore St., Denver, Colo.	'15
Eardley, Walter Hazen, Asst. Mgr., U. S. Smelt. Refin. & Min. Co., Newhouse Bldg., Salt Lake City, Utah.		'18
Eardley-Wilmot, V. L., Min. Engr., Mines Branch, Dept. of Mines, Sussex St., Ottawa, Ont., Canada.		'20
Earling, Roy B., Cons. Engr., Fairbanks Exploration Co.....	Fairbanks, Alaska.	'11
Easley, George A., Easley & Inslee.....	120 Broadway, New York, N. Y.	'23
East, J. H., Jr., Asst. Wks. Mgr., Alabaster Plant, U. S. Gypsum Co.....	Alabaster, Mich.	'26
Easter, Henry F., Supt., Hayden Smelter, American Smelt. & Refin. Co.....	Hayden, Ariz.	'14
Eastman, B. L., Min. Engr.....	Riondel, B.C., Canada.	'24
†Eastman, Walter F., Geol. Dept., Huasteca Pet. Co.....	Apt. 94, Tampico, Tamps, Mexico.	'24
Eastment, Somerville H., Mgr., Brighton Coal Min. Co.....	Osceola Mills, Pa.	'22

For explanation of symbols, see page 5.



Easton, Stanly A., Min. Engr., V.P. & Mgr., Bunker Hill & Sullivan Min. & Concentrating Co., Kellogg, Idaho.	'98
Eastwood, L. W., Student.....Platteville, Wis.	'28
Eaton, Lucien, Min. Engr., Supt. of Ishpeming Dist., Cleveland-Cliffs Iron Co., Cliffs Shaft Mine, Ishpeming, Mich.	'01
Eavenson, Howard N., Min. Engr., Howard N. Eavenson & Associates, 1300 Union Trust Bldg., Pittsburgh, Pa.	'00
Ebbutt, Frank, Geol., Britannia Min. & Smelt. Co., Ltd....Britannia Beach, B. C., Canada.	'27
Eby, J. Brian, Geol., Shell Pet. Corp.....Box 1865, Houston, Tex.	'25
Eckel, John Edward, Pet. Engrg. Dept., Humble Oil Co.....Houston, Tex.	'29
Eckfeldt, Howard, Prof., Min. Engrg., Lehigh University.....Bethlehem, Pa.	'02
Eckrote, Kenneth R., U. S. Gypsum Co.....Oakfield, N. Y.	'28
Eckstorm, Paul F., Mass. Inst. of Tech.....Cambridge, Mass.	'23
†Eddelman, W. S., Jr., Mine Foreman, Cia. Minera de Penoles, Sierra Mojada, Unidad, Esmeralda, Coah., Mexico.	'21
Eddison, W. Barton, Cons. Mech. Engr.....Ardley-on-Hudson, N. Y.	'19
†Eddy, Corbin T., Instructor in Met., Michigan College of Min. & Tech.....Houghton, Mich.	'29
Eddy, Harold C., Chief Engr., Petroleum Rectifying Co. of California, Security Title Insurance Bldg., 530 W. 6th St., Los Angeles, Cal.	'17
Eddy, Lawrence, Field Supervising Engr., F. H. McGraw & Co., Box 127, Alabama City, Ala.	'28
Eddy, R. Bulford, Min. Engr., St. John Del Rey Mining Co., Ltd., Morro Velho, Raposos E.F.C.B., Minas Geraes, Brazil.	'23
Ede, J. A., Cons. Min. Engr.....La Sallé, Ill.	'98
Edeleanu, L., Managing Dir., A.G.E.F.C.I.....11 W. 42nd St., New York, N. Y.	'27
Edeleanu, A. W.....Avenida Juarez 88, Mexico City, D.F., Mexico.	'03
Edison, Thomas A., Elec. Engr. & Inventor.....Orange, N. J.	'89
†Edmonds, R. W., U. S. Smelt., Refin. & Min. Co.....1 State St., Boston, Mass.	'29
†Edmunds, Gerald, Metal Section, Research Div. New Jersey Zinc Co.....Palmerton, Pa.	'29
Edwards, Edward Tudor, V.P. & Gen'l Mgr., Latrobe Electric Steel Co.....Latrobe, Pa.	'18
†Edwards, Everett Carlyle, Chief Geol., The Exploration Co., 303 Mays Bldg., San Angelo, Tex.	'20
Edwards, Hugh Robert, Chief Engr., Anglo-Oriental Min. Corp., Ltd., 31 Bishopsgate, London, E.C.2, England.	'16
†Edwards, J. I., Mgr., Rock Drill Div., Chicago Pneumatic Tool Co., 6 E. 44th St., New York, N. Y.	'24
Edwards, M. G., Geol., Shell Co. of California.....Higgins Bldg., Los Angeles, Cal.	'21
Edwards, Victor E., Mech. Engr., V.P., Morgan Construction Co.....Worcester, Mass.	'06
Edwin, John, Min. Engr., Missouri Ore Co.....Iron Mountain, Mo.	'18
Eells, Howard P., Jr., Pres., Dolomite, Inc., Sturgeon Bay Co. & V.P., The Atchison & Eastern Bridge Co., 1510 Hanna Bldg., Cleveland, Ohio.	'27
Egbert, R. O. B., Civ. & Min. Engr.....100-09 210th St., Bellaire, L. I., N. Y.	'20
Egeberg, B., Met., International Silver Co.....Meriden, Conn.	'28
Egleston, O. J., Gen'l Mgr., Fairbanks Exploration Co., Hammon Cons. Gold Fields, Fairbanks, Alaska.	'19
Egloff, Gustav, Pet. Tech., Dir., Research, Universal Oil Products Co., Strauss Bldg., Chicago, Ill.	'22
Ehle, Mark, Prof., Min. Engrg., Univ. of Arizona, Univ. Sta.....Tucson, Ariz.	'27
Ehlen, M. C., V.P., Crown Central Pet. Corp., 14th Floor, Post Dispatch Bldg., Houston, Tex.	'21
Ehnbom, L., Asst. Gen'l Mgr. & Engr., Charge of Operations, Piermont Mines, Inc., Aurum, via McGill, Nev.	'20
Eichrodt, Charles W., Evans-Wallower Zinc Co.....P. O. Monsanto, East St. Louis, Ill.	'17
†Eilers, K. Fritz, Min. Engr.....Room 5002, 233 Broadway, New York, N. Y.	'21
Eilers, Karl, Met.....Suite 5001-4, 233 Broadway, New York, N. Y.	'88
†Eilertsen, Donald Elton, American Bauxite Co.....Bauxite, Ark.	'27
Eilertsen, Nils A., Chief Min. Engr., Horne Copper Corp.....Noranda, Que., Canada.	'21
Eirich, Constance Grace (Miss), Pet. Geol., Gypsy Oil Co.....Box 2044, Tulsa, Okla.	'19
Eisele, George J., Asst. Gen'l Supt., Oliver Iron Mining Co.....Iron Mountain, Mich.	'16
Ekeberg, V. E., Magma Copper Co.....Box 474, Superior, Ariz.	'20
†El-Difrawi, Abdel Hamid, Dept. of Mines.....Cairo, Egypt.	'27
Eldred, Byron E., Cons. Engr.....41 East 42nd St., New York, N. Y.	'10
†Eldridge, J. B., Min. & Law.....Box 1206, Boise, Idaho.	'28
Elfred, Frank Stillman, Jr., Min. Engr., Golden Rod Min. & Smelt. Corp., Baxter Springs, Kans.	'17
†Elgin, Robert A., Jigger Boss, United Verde Copper Co.....Box 1360, Jerome, Ariz.	'26
†Elguin A., Augustin N., Civil Engr., Comunidad Minera Elguin, Los Bronces, Las Condes, Santiago, Chile.	'20
†Elias, Gwyn, Pet. Engr., Phoenix Oil & Transport Co., Ltd....Moreni, Prahova, Romania.	'25
Elias, Maxim K., Geol., State Geol. Survey of Kansas.....Lawrence, Kans.	'28
Elicano, Victoriano, Asst. Dir. & Chief, Div. of Mines, Bureau of Science....Manila, P. I.	'24

Eliot, Edward Lee, Production Dept., Sherwin Williams Paint Co.....	Chicago, Ill.	'28
Eliot, Walter Graeme, Retired, Civil & Min. Engr. & Capitalist, University Club, 1 W. 54th St., New York, N. Y.		'29
+Elkan, Benno, V.P., International Minerals & Metals Corp.....	61 Broadway, New York, N. Y.	'12
+Elli, Eduardo L. E., Tech. Assayer & Mgr., Refineria de Petroleo, "La Isaura" S. A., Casilla de Correo 123, Bahia Blanca, Argentina.		'20
Elliott, George Reginald.....	2 Immigration Bldg., Calgary, Alta., Canada.	'22
Elliott, John E., Pet. Engr., Pres., Elliott Core Drill Co., 850 Subway Terminal Bldg., 417 South Hill St., Los Angeles, Cal.		'18
Elliott, S. R., Min., Gen'l Supt., The Cleveland-Cliffs Iron Co.....	Ishpeming, Mich.	'20
Elliott, William, Partner & Mgr., Norththompson Lime Products Co., Vavenby, B. C., Canada.		'20
Ellis, E. E., Pres., Universal Exploration Co....	Room 2013, 71 Broadway, New York, N. Y.	'07
Ellis, E. Y., Min. Engr.....	Box 433, Joplin, Mo.	'24
Ellis, Ernest W.....	Walker Mine, Spring Garden, Cal.	'13
Ellis, George L., Pet. Geol., Geol. Dept., United Fuel Gas Co.....	Charleston, W. Va.	'29
+Ellis, James, Field Mgr., The Indo-Burma Pet. Co., Ltd., Box 1059, Rangoon, Burma, India.		'27
Ellis, Owen William, Met. Engr., Ontario Research Foundation, 47 Queen's Park, Toronto, Ont., Canada.		'21
+Ellis, William C., Met., Bell Telephone Labs.....	463 West St., New York, N. Y.	'29
Ellis, William N., Met., American Smelt. & Refin. Co.....	Murray, Utah.	'14
Ellison, Robert S., V.P., The Midwest Refin. Co.....	Casper, Wyo.	'25
+Ellson, C. W., Chief Engr., Lake Shore Mines, Ltd.....	Kirkland Lake, Ont., Canada.	'27
Ellsworth, John T.....	Apt. 1, 734 North 23rd St., East St. Louis, Ill.	'17
Elmendorf, William J.....	905 Allison St., Seattle, Wash.	'28
Elmer, William W., Cons. Min. Engr.....	215 Pacific Bldg., Portland, Ore.	'98
+Elrod, William Herbert, Resident Engr. & Draftsman, St. Clair County Highway Dept., Belleville, Ill.		'22
Elsing, M. J., Min. Engr. & Geol.....	1227 East Second St., Tucson, Ariz.	'13
Elstone, Earl Francis, Min. Engr.....	Rose Lake, Idaho.	'27
Elton, J. O., Mgr., International Smelt. Co.....	818 Kearns Bldg., Salt Lake City, Utah.	'13
Ely, Fred B., Cons. Geol.....	Room 553, 11 Broadway, New York, N. Y.	'15
Emanuel, L. V.....	515 East 11th Ave., Denver, Colo.	'00
Emens, Warren H., Min. Engr., The Mining Corp. of Canada, Ltd., Box 913, Cobalt, Ont., Canada.		'20
Emerick, William L., Student, New Mexico School of Mines.....	Socorro, N. M.	'27
Emerson, Edward H., Cons. Min. Engr.....	122 Livingston St., Brooklyn, N. Y.	'12
Emerson, Harrington, Efficiency Counselor, Chairman, The Harrington Emerson Counselors, 30 Church St., New York, N. Y.		'18
Emerson, L. W., Engr., United States Smelt. Refin. & Min. Co....	1 State St., Boston, Mass.	'21
Emery, Augustus Bachelder, Gen'l Mgr., Messina Transvaal Dev. Co., Ltd., Box 36, Messina, Transvaal, S. Africa.		'02
Emery, Cyril J., Min. Engr., Gen'l Supt., North Broken Hill, Ltd., Box 138, Broken Hill, N. S. W., Australia.		'21
Emery, William, Jr., Pres., The Cambridge Collieries Co., 1050 Rockefeller Bldg., Cleveland, Ohio.		'14
Emery, Wilson B., Geol., The Ohio Oil Co.....	Box 1079, Casper, Wyo.	'20
Emilio, S. Gilbert, Min. Engr.....	7 Winter St., Salem, Mass.	'19
Emlaw, Harlan S., The Gold Fields American Dev. Co., Ltd., 233 Broadway, New York, N. Y.		'98
Emmanuel, Arthur B., Min. Engr., U. S. Coal & Coke Co.....	Gary, McDowell Co., W. Va.	'22
Emmel, Rudolph, Supt., Northern Peru Min. & Smelt. Co.....	Casilla 162, Trujillo, Peru.	'11
Emmens, Newton W., 616 National City Bank Bldg., 810 South Spring St., Los Angeles, Cal.		'03
+Emmerson, E. Roy, Min. Engr.....	Port Arthur, Ont., Canada.	'15
Emmons, Carolus D., Mining.....	Multnomah Hotel, Portland, Ore.	'07
Emmons, Joseph V., Met., The Cleveland Twist Drill Co., 3284 Chadbourne Rd., Cleveland, Ohio.		'20
Emmons, William H., Geol., Dir., Minn. Geol. Survey, Univ. of Minnesota, Minneapolis, Minn.		'07
Emory, Lloyd T., Cons. Engr., 233 Salisbury House, London Wall, E.C.2, London, England.		'24
+Emrath, Philip Cassily, Min. Dept., Univ. of Kentucky.....	Lexington, Ky.	'24
+Endweiss, J. A., Guggenheim Bros.....	Room 3523, 120 Broadway, New York, N. Y.	'18
+Engel, Abraham L., Buchans Min. Co.....	Buchans, Newfoundland.	'19
Engel, Rene, Dept. of Geol., California Inst. of Tech.....	Pasadena, Cal.	'20
Engelder, Oscar G., Min. Engr.....	Barstow, Cal.	'23
Engelmann, E. W., Supt., Magna Plant, Utah Copper Co.....	Magna, Utah.	'17
Engels, Andrew L., Mech. Engr.....	Box 442, Hubbell, Mich.	'23
Engle, Edgar W., Met., Fansteel Products Co., Inc.....	No. Chicago, Ill.	'18
Englehart, G. W., Min. Engr., El Canario Cons. Copper Co., S. A., Nacozari, Son., Mexico.		'25
+Engleman, Rolf, Geol., Venezuelan Atlantic Refin. Co.....	Apt. 223, Maracaibo, Venezuela.	'24
English, Walter A., Mgr., Continental Air Maps.....	114 S. Beaudry St., Los Angeles, Cal.	'18
Ennis, Richard J., Gen'l Mgr., McIntyre Porcupine Mines, Ltd., Schumacher, Ont., Canada.		'27

Enos, George M., Asst. Prof. of Met., Chemistry Bldg., Univ. of Cincinnati,	Cincinnati, Ohio.	'19
Enos, Herbert Cory, Min. Engr.	1216 Pacific Mutual Bldg., Los Angeles, Cal.	'13
Entrekin, LeRoy Jackson.	1110 E. Lincoln Highway, Coatesville, Pa.	'27
Entrekin, Paul B., Mine Supt., Cornwall Div., Bethlehem Mines Corp.	Cornwall, Pa.	'25
Enzian, Charles, Min. Engr., Berwind-White Coal Min. Co.	Windber, Pa.	'11
Eppelsheimer, D., Jr., Cons. Engr., The American Rolling Mill Co.	Middletown, Ohio.	'23
Epstein, Samuel, Research Metallographer, Illinois Steel Co.	South Chicago, Ill.	'26
Erasmus, H. de Wet, Research Engr., Union Carbide & Carbon Research Labs., Inc., Thompson Ave. & Manley St., Long Island City, N. Y.		'30
Erb, J. Th., Dir., Royal Dutch Pet. Co.	Carel van Bylandtlaan 30, The Hague, Netherlands.	'20
Ercanbrack, H. Edmund, Works Engr., The Hegeler Zinc Co., R.R. 8.	Danville, Ill.	'20
Erdlets, Joseph F. B., Jr., Min. Engr.	Room 807, 25 Broadway, New York, N. Y.	'03
Erdman, Emery G., Div. Engr., Susquehanna Collieries Co.	Shamokin, Pa.	'25
Erdmann, Charles Edgar, U. S. Geol. Survey.	212 Customhouse Bldg., Denver, Colo.	'24
Erdofy, Maxwell E., Furlaud & Co., Inc.	52 Wall St., New York, N. Y.	'16
Erickson, Arthur, Mech. Engr., United States Smelt. Refin. & Min. Co., 1005 Newhouse Bldg., Salt Lake City, Utah.		'19
Ericson, Eric John, Chief Chem., Standard Forgings Co.	East Chicago, Ind.	'20
Ericson, Rudolph, Gen'l Supt., Davidson Ore Min. Co.	Iron River, Mich.	'14
Ericsson, Eric A., Engr., Oxelosunds Järnverksaktiebolag.	Oxelosund, Sweden.	'20
Erion, Richard L., Jr. Engr., Chile Exploration Co., Chuquicamata, Chile, via Antofagasta.		'29
Erlenborn, Willi, Asst. Prof. of Min., McGill Univ.	Montreal, Que., Canada.	'20
Erni, Arthur, Geol.	Olten, Switzerland.	'21
Erquiaga, Ruben, Gen'l Mgr., Empresa Minera San Juan, Ltd., Choquebamba, Chimbote, Peru.		'21
Ervin, Waldemar M.	3026 Frankfort St., El Paso, Tex.	'24
Erwin, Robert W., Supt., Mines & Concentrating Plant, Mississippi Valley Iron Co., 6500 S. Broadway, St. Louis, Mo.		'27
Escher, Frank, Min. Pet. Institute der E. T. H.	Zurich, Sonneggstr., Switzerland.	'26
Esenwein, I. A., Sales Engr., Sterling Steel Castings Co., Box 66, East St. Louis, Ill.		'20
Espie, F. F., Asst. Mine Supt., Burmah Corp.	Bawdwin, N. S. S., Burma, India.	'19
Estabrook, Edward L., Pet. Engr., Pan American Pet. & Transport Co., 122 E. 42nd St., New York, N. Y.		'13
Estabrook, W. H., Pres. & Gen'l Mgr., Estabrook Gold Dredging Co.	Trinity Center, Cal.	'13
Estep, Frank L., Chief Engr., Perin & Marshall, 17th Floor, Salmon Tower Bldg., 11 W. 42nd St., New York, N. Y.		'21
Ettlinger, I. A., Min. Geol. & Engr.	Room 1409, 149 Broadway, New York, N. Y.	'15
Eubanks, George, Supt., Shaft Sinking, E. J. Longyear Dev. Co., 710 Security Bldg., Minneapolis, Minn.		'21
Eulich, A. V., Sec.-Treas., Centropolis Crusher Co.	908 W. 25th St., Kansas City, Mo.	'17
Eurich, E. F., Met. Engr.	Hotel Chelsea, 222 W. 23rd St., New York, N. Y.	'74
Eustis, Augustus H., Min. Engr.	131 State St., Boston, Mass.	'02
Eustis, Frederic A., Cons. Engr.	131 State St., Boston, Mass.	'02
Eustis, William E. C., Min. and Smelt.	131 State St., Boston, Mass.	'76
Evans, Arthur McConnell, Jr. Engr., Braden Copper Co.	Rancagua, Chile.	'25
Evans, Cadwallader, Jr., Cons. Engr., Gen'l Mgr., The Hudson Coal Co., Wyoming Ave., Scranton, Pa.		'15
Evans, Charles E., Designing Engr., Barber Greene Co.	Aurora, Ill.	'19
Evans, Charles Tyndale, Met., Cyclops Steel Co.	Titusville, Pa.	'19
Evans, E. Paul, Asst. Cashier, Milton Banking Co.	Wellston, Ohio.	'26
Evans, George W., Cons. Coal Min. Engr.	2207 L. C. Smith Bldg., Seattle, Wash.	'07
Evans, Harry J., Supt., Cia. Minera Nazareno y Catasillas, S. A., Salaverna, Zuc., Mexico.		'18
Evans, J. Claire, V.P., The Denver Fire Clay Co.	1742 Champa St., Denver, Colo.	'20
Evans, James Rowlands, Companhia de Diamantes, Chinguar, Angola, P. W. A., Via Lisbon, Lobito Bay.		'20
†Evans, Lewis Orvis, General Counsel, Anaconda Copper Min. Co., Hennessy Bldg., Butte, Mont.		'28
†Evans, M. Albert, Elkhorn Piney Coal Min. Co.	Wharton, Boone County, W. Va.	'29
†Evans, Mark, Foreman, Wallace Silver-Lead Mines Co.	Box 39, Wallace, Idaho.	'20
Evans, Robert Allison, Supt., Lehigh Valley Coal Co.	Hazleton, Pa.	'20
Evans, Samuel, Chairman & Mngng. Dir., Crown Mines, Corner House, Johannesburg, Transvaal, S. Africa.		'15
†Evans, T., Gen'l Mgr., The Cananea Cons. Copper Co.	Cananea, Son., Mexico.	'17
Evans, W. F., Min. Engr., New Jersey Zinc Co. (of Pa.)	Franklin, N. J.	'17
Evans, William S., Pres., Lucey Products Corp.	3505 Woolworth Bldg., New York, N. Y.	'19
Eveland, A. John, Dwight P. Robinson & Cia. de la Argentina, Estación Federico Lacroze, Buenos Aires, Argentina.		'03
Evered, N. J., Min. Engr.	Haileybury, Ont., Canada.	'04
Everest, H. A., Min. Engr. & Geol.	1032 No. Ogden Drive, Hollywood, Cal.	'21
†Everett, William Wynn, Section Foreman, Glen Alden Coal Co.	Hanover Township, Pa.	'24



†Everhart, John L., Chem. & Asst. in Forge & Heat Treating Depts., Wyoming Shovel Wks., Wyoming, Pa.	'29
†Everit, Richard Sturtevant, Min. Engr. & Geol., San Vicente Min. Co., San Vicente, Sin., Mexico.	'19
Everly, Paul D., Engr., Pittsburgh Coal Co.	Pittsburgh, Pa. '27
Evers, Harry, Production Engr., Venezuela Gulf Oil Co., Apt. 234, Maracaibo, Venezuela.	'25
†Evesmith, Hansen, Mine Operator, Athletic Club.	Minneapolis, Minn. '27
†Evesmith, Ruggles Wilson, Student, North Dakota Agricultural College.	Fargo, N. D. '27
†Ewing, John A., Atty.-at-law, First National Bank Bldg.	Denver, Colo. '28
Eye, Clyde M., Min. & Met. Engr., States Rep., Benguet Cons. Min. Co., 1107 Hobart Bldg., San Francisco, Cal.	'98
Eyoub, Djevad, Geol., Empire Oil & Gas Co. of Mexico, Apt. 1388, Tampico, Tamps., Mexico.	'15
†Ezcurra, Thomas M., Industrial Engr.	Canning 2805, Buenos Aires, Argentina. '28
Faber, Paul, Dir., Acieries de Champagnole, Place de la Mairie, La Courneuve (Seine), France.	
Fabian, Francis G., Investigation & Finance Corp.	105 W. Adams St., Chicago, Ill. '14
Fabe, Numeriano A., Student, School of Mines, Washington State College.	Pullman, Wash. '27
Fackenthal, B. F., Jr.	Riegelsville, Pa. '80
Fagadau, Simeon H., Engr.	601 Hamilton Bldg., 900 8th St., Wichita Falls, Tex. '27
Fahmy, El-Hanafi E. S., Pet. Engr., Dept. of Mines & Quarries.	Cairo, Egypt. '26
Fahrenwald, A. W., Prof. of Met., School of Mines, University of Idaho.	Moscow, Idaho. '23
Fahrenwald, F. A., Min. Engr., Cons. Engr.	333 No. Michigan Blvd., Chicago, Ill. '13
Fahringer, Walter, Supt., Lehigh & Wilkes-Barre Coal Co.	Audenried, Pa. '14
Fairbairn, Charles T.	1006 American-Traders Bank Bldg., Birmingham, Ala. '05
Fairchild, S. E., Jr., Pres., Cruse Kemper Co.	Ambler, Pa. '98
Fairchild, Sidney A., Min. Engr.	Apt. 65, Monterrey, N. L., Mexico. '93
Fairlie, M. F., Min. Engr., The Min. Corp. of Canada, Ltd., 350 Bay St., Toronto 2, Ont., Canada.	'20
Fairweather, Andrew, Min. Engr., Mine Supt., Broken Hill South, Ltd., South Mine, Broken Hill, N. S. W., Australia.	'20
Falco, Arturo Ruiz, Engr. of Mines, Mngng. Dir. Sociedad Anonima Minas de Cartes, Torrelavega, Prov. Santander, Spain.	'27
Fancher, Walter Johnson, Mine Supt., White Caps Gold Min. Co.	Manhattan, Nev. '26
Faneuf, S. C., Min. Engr., Amparo Min. Co.	Eztatlan, Jal., Mexico. '07
Farish, C. S. T., Asst. Mine Supt., Soc. Min. Backus y Johnston del Peru, Casapalca, Peru.	'20
Farish, Fred G., Cons. Min. Engr.	102 Jamaica Ave., Flushing, L. I., N. Y. '06
Farish, George E., Cons. Min. Engr.	25 Broad St., New York, N. Y. '05
†Farish, Linn M., Mgr., Alberta Gas & Fuel Co.	Pincher Creek, Alta., Canada. '28
Farmer, Clarence H., Green River Fuel Co.	Mogg, Ky. '26
Farmer, I. W., Chief Engr., Central Coal & Coke Co.	Kansas City, Mo. '28
Farmer, Ray J., Chief Mine Engr., Morenci Branch, Phelps Dodge Corp.	Morenci, Ariz. '22
Farmin, Rollin, Geol., Utah-Delaware Min. Co.	Bingham Canyon, Utah. '26
Farnham, L. L., Min. Engr., American Metals, Inc.	Darwin, Cal. '14
Farnham, Sidney W., Min. Engr., Goodman Mfg. Co.	4834 S. Halsted St., Chicago, Ill. '26
Farny, George W., Cons. Min. Engr.	Craftsman Farms, Morris Plains, N. J. '14
Farr, T. H. Powers, Jr., Industrial & Chem. Engr.	116 Coolidge St., Irvington, N. J. '17
Farrand, Elbridge Bacon, Chief Engr., Cannelton Coal & Coke Co. & Lake Superior Coal Co., Cannelton, W. Va.	'25
Farrant, J. Clifford, Gen'l Mgr., International Combustion, Ltd., 11 Southampton Row, London, W. 1, England.	'12
Farrar, B. L.	1127 Montana St., El Paso, Tex. '06
Farrar, Willard, Jr. in Min., Missouri School of Mines & Met.	Rolla, Mo. '29
Farrrell, James A., Pres., U. S. Steel Corp.	Room 1817, 71 Broadway, New York, N. Y. '20
Farrell, John H., Min. Geol.	114 Sansome St., San Francisco, Cal. '26
Fath, A. E., Geol.	Chrisman, Ill. '20
Faulkner, Robert, Bethlehem Steel Co.	Lebanon, Pa. '14
†Faure, Jacques A., Administrateur Directeur Adjoint, Société des Mines de Zinc du Guergour, Algeria, Africa.	'24
Fawcett, Lewis Hooff, Met. Engr., U. S. Naval Gun Factory.	Washington, D. C. '19
†Fawcett, T. S. C., Harker Gold Mine.	Matheson, Ont., Canada. '20
Fay, Albert H.	245 Forest Ave., Glen Ridge, N. J. '02
Fear, Thomas G., Safety & Transportation Engr., The Consolidation Coal Co., Watson Bldg., Fairmont, W. Va.	'18
Fearing, Frederick C., Cons. Min. Engr.	56 Valley Rd., Bronxville, N. Y. '15
Fears, Charles W., Mine Supt., Cia. Minera La Piedra Bola.	Anualulco, Jal., Mexico. '21
Fedoroff, Vsevolod.	100 Convent Ave., Apt. 402, New York, N. Y. '23
Fees, L. V., Geol., Ohio Oil Co.	941 S. Williams St., Denver, Colo. '29

For explanation of symbols, see page 5.

Feild, Alexander L., J. E. Johnson, Jr., Award, A.I.M.E., 1923; Research Engr., Simonds Saw & Steel Co., Lockport, N. Y.	'17
Feiss, Julian William, Rhodesian Congo Border Concession, Ltd., N'Changa via N'Dola, N. Rhodesia, Africa.	'28
Feldtmann, William Robert.....Grootfontein, Southwest Africa, via Cape Town.	'91
+Feleady, Charles F., Met. Engr.....213 Spring St., Bellevue, Pittsburgh, Pa.	'17
Fell, Harold B., Pres., Simpson Fell Oil Co.....Box 778, Ardmore, Okla.	'14
Feltner, Joseph.....Address Wanted.	'25
+Felton, Cornelius C., Calumet & Hecla Min. Co.....12 Ashburton Pl., Boston, Mass.	'18
Fene, William J., Min. Engr., U. S. Bureau of Mines, Univ. of Utah...Salt Lake City, Utah.	'24
Fenner, Clarence N., Petrologist, Carnegie Institution, Geophysical Laboratory, 2801 Upton St., Washington, D. C.	'96
Fera, C., Cons. Engr.....4 Via Saredo, Villa Benesch, Savona, Italy.	'04
Ferguson, C. V., Research Engr., General Electric Co.....Schenectady, N. Y.	'14
Ferguson, Claude, Min. Engr.....Grass Valley, Nevada Co., Cal.	'12
Ferguson, Henry G., Geol., U. S. Geological Survey.....Washington, D. C.	'05
Ferguson, John L., Geol., Amerada Pet. Corp.....Box 2022, Tulsa, Okla.	'22
Ferguson, R. N., Cons. Pet. Engr. & Geol....547 Subway Terminal Bldg., Los Angeles, Cal.	'21
+Fernald, Henry B., Loomis, Suffern & Fernald....14th Floor, 50 Broad St., New York, N. Y.	'20
Fernandez, A. L., Min. Engr., Min. Manganese Ores, Fabrica de Talamantes, Valle de Allende, Chih., Mexico.	'17
Fernandez, Charles A., Pet. Engr., Asst. Rotary Supt. Yacimientos Petroliferos, Chubut, Argentina.	'24
Fernandez-Ladreda, Jose Maria, Marques Santa Cruz.....7 Bajo, Oviedo, Spain.	'21
+Fernandini, E. P.....La Riva 400, Lima, Peru.	'20
Ferreira, Edgar C. Franco, Hawthorne Wks., Western Electric Co.....Chicago, Ill.	'25
Ferri, John T., Min. Engr., Enterprise Silver Min. Co.....Modena, Utah.	'25
Ferrier, W. F., Min. Engr. & Geol.....87 Harper Ave., Toronto 5, Ont., Canada.	'99
Ferris, A. L., Field Engr., Cia. Minera de Penoles, S. A., Apt. 251, Monterrey, N.L., Mexico.	'15
Ferron, Robert D., Cons. Min. Engr., Fabulosa Mines Cons., Casilla 27-A, La Paz, Bolivia.	'18
Ferry, Charles.....886 Main St., Bridgeport, Conn.	'93
Ferry, Douglass Hewitt, Cons. Placer Min. Engr.....Rogue River, Ore.	'20
Ferry, William Montague, V.P. & Mngng. Dir., Silver King Coalition Mines Co., 1014 Kearns Bldg., Salt Lake City, Utah.	'23
Fetherston, John T., V.P. & Res. Mgr., Sterling Salt Co....Cuylerville, Livingston Co., N. Y.	'22
Fettke, Charles R., Assoc. Prof. of Geol. & Mineralogy & Cooperating Geol., Carnegie Inst. of Tech. & Pennsylvania Geol. Survey, Pittsburgh, Pa.	'14
Fickes, Edwin S., V.P., Aluminum Co. of America.....2411 Oliver Bldg., Pittsburgh, Pa.	'18
Fickes, Frank Akin, Supt. of Mines, Aluminum Ore Co.....East St. Louis, Ill.	'23
Field, Burnham E., Union Carbide & Carbon Research Labs., Inc., 30 E. 42nd St., New York, N. Y.	'20
Field, Herbert E., Met., Pres. & Gen'l Mgr., The Wheeling Mold & Foundry Co., Wheeling, W. Va.	'03
Field, Thorold F., Min. Engr., Congdon Estate.....807 Lonsdale Bldg., Duluth, Minn.	'17
Fieldner, Arno C., Chief Engr., Exper. Stations Div., Bureau of Mines...Washington, D. C.	'20
Fies, Milton H., V.P., DeBardeleben Coal Corp., 10th Floor, Southern Railway Bldg., Birmingham, Ala.	'10
Filteau, Charles Alexander.....260 S. Grant St., Denver, Colo.	'15
Finch, Elmer H., Div. Geol., Atlantic Oil Producing Co., 707 Giddens-Lane Bldg., Shreveport, La.	'22
Finch, John Wellington, Cons. Geol. & Engr....705 First National Bank Bldg., Denver, Colo.	'00
Findley, Alvin L., Editor, <i>The Iron Age</i> .....239 W. 39th St., New York, N. Y.	'18
Fink, August Albert, Gen'l Foreman of Refinery, Nichols Copper Co., Laurel Hill, L. I., N. Y.	'29
Fink, Colin Garfield, Electrochem., Research Engr., Head, Div. of Electrochemistry, Columbia Univ., New York, N. Y.	'18
Fink, William N., Min. Engr., Gen'l Mgr., Cusi-Mexicana Min. Co., Apt. 4, Cusiuhirachic, Chih., Mexico.	'05
Finkeldey, William H., Met. Engr., Singmaster & Breyer, 420 Lexington Ave., New York, N. Y.	'16
Finlay, J. S., Mine Supt., International Smelt. Co.....Eureka, Utah.	'25
Finlay, James R., Min. Engr.....Room 1510, 19 W. 44th St., New York, N. Y.	'95
Finley, Clyde H., Poteau Refined Oil Co.....Poteau, Okla.	'21
Finucane, T. R.....1204 Lincoln Alliance Bank Bldg., Rochester, N. Y.	'17
Fischer, Arthur Herman, Research Chem. & Met., Guggenheim Bros. Labs., 3771 10th Ave., New York, N. Y.	'29
+Fischer, Christian J. G., Pres., Fischer-Sweeny Bronze Co., Inc.....Bound Brook, N. J.	'13
Fischer, G. H., Cadet Engr., Seaboard By-Product Coke Co.....Jersey City, N. J.	'27
Fischer, Oscar A., Min. Engr.....773 Williams St., Denver, Colo.	'19

Fischer, Otto, Geol., Owens, Libbey & Owens Gas Dept.....	Box 1375, Charleston, W. Va.	'21
Fish, G. E., Student, West Virginia Univ.....	Morgantown, W. Va.	'26
Fish, Laurence E., Chile Exploration Co.....	Chuquicamata, Chile, via Antofagasta.	'29
Fishback, Martin, Min. Engr.....	Box 1812, Tucson, Ariz.	'17
Fisher, Alfred, Chem. Engr.....	39 Broadway, New York, N. Y.	'27
Fisher, Cassius A., Geol. & Pet. Engr., Fisher & Lowrie,	711 First National Bank Bldg., Denver, Colo.	'20
Fisher, D. Jerome, Asst. Prof. of Geol., Rosenwald Hall, Univ. of Chicago.....	Chicago, Ill.	'28
Fisher, Edward John Paul, Metallographist, Keystone Steel & Wire Co.....	Peoria, Ill.	'29
Fisher, George Kingsbury, Met. Engr.....	12 Rockledge Rd., Saranac Lake, N. Y.	'19
Fisher, Norman R., Cons. Min. Engr.....	132 St. James St., W. Montreal, Que., Canada.	'07
Fisher, Thomas, V.P., The Berwind-White Coal Min. Co.,	1100 Commercial Trust Bldg., Philadelphia, Pa.	'89
Fisher, Thomas E., Min. Engr., Sales Rep., Allis-Chalmers Mfg. Co.,	50 Church St., New York, N. Y.	'16
Fisk, Henry Grunsky, Petrographer, Universal Portland Cement Co.,	Buffington Plant, Buffington, Ind.	'27
Fiske, C. P., Chief of Spelter, Palmerton Works, New Jersey Zinc Co. of Pa.	Palmerton, Pa.	'18
Fitch, Cecil, Supt., Chief Consolidated Min. Co.....	Eureka, Utah.	'14
Fitch, Howard W., Min. Engr., Asst. to Geol., Chief Cons. Min. Co.....	Eureka, Utah.	'15
Fitch, Max B., Min. Engr.....	543 Title Insurance Bldg., Los Angeles, Cal.	'98
Fitch, W. H., Carborundum Co.....	Perth Amboy, N. J.	'20
Fitch, Walter, Pres., Chief Consolidated Min. Co.....	Eureka, Utah.	'05
Fitch, Walter, Jr., Walter Fitch, Jr., Co.....	Eureka, Utah.	'14
Fitzgerald, John M.....	143 Liberty St., New York, N. Y.	'01
Fitzhugh, Edward F., St. Joseph Lead Co.....	Edwards, St. Lawrence Co., N. Y.	'29
Fitzpatrick, Eugene, Chem., Nichols Copper Co.....	Laurel Hill, L. I., N. Y.	'28
Flagg, Arthur L., Cons. Engr.....	306 Goodrich Bldg., Phoenix, Ariz.	'12
†Flagg, Frederick P., Chief Chem., Waltham Watch Co.....	Waltham, Mass.	'19
Flagg, Stanley G., Jr.....	1421 Chestnut St., Philadelphia, Pa.	'92
Flaherty, J. H., Met., South Side Works, Jones & Laughlin Steel Corp.....	Pittsburgh, Pa.	'29
Flanagan, Joseph M., Rock Drill Sales Dept., Ingersoll-Rand Co.,	11 Broadway, New York, N. Y.	'20
Flanagan, Victor Evans, Georgia Manganese & Iron Co.....	White, Ga.	'23
Flautz, Paul E., Apprentice Engr., National Tube Co.....	Ellwood City, Pa.	'26
Fleming, A. P. M., Special Director & Mgr., Research & Education, Metropolitan Vickers	Electrical Co., Trafford Park, Nr. Manchester, England.	'28
Fleming, Andrew A., Chief Chem. & Met., Dominion Arsenal.....	Quebec, Que., Canada.	'19
Fleming, Edward P., Met., American Smelt. & Refin. Co.....	120 Broadway, New York, N. Y.	'02
Fleming, Henry S., Cons. Engr., Henry S. Fleming Co., Inc.....	1 Broadway, New York, N. Y.	'03
†Fleming, Matthew C., Lawyer.....	50 Broadway, New York, N. Y.	'20
Fleming, Robert Moffatt, Min. Engr., Ebensburg Coal Co.....	Colver, Pa.	'24
Fleming, Russell Clark.....	1012 Hillcrest Pl., Miami, Ariz.	'28
Fleming, W. W., Min. Engr., Dist. Min. Supervisor, Mineral Leasing Div., U. S. Geol. Survey,	McAlester, Okla.	'28
Fletcher, Garner, Mgr. of Mines, Mallory Coal Co. & Pond Creek Poca. Co.,	Room 712, Robson & Pritchard Bldg., Huntington, W. Va.	'20
Fletcher, H. W., Chief Engr., Hughes Tool Co.....	300 Hughes St., Houston, Tex.	'20
Fletcher, J. H., Member of Firm, Allen & Garcia Co.	21 E. Van Buren St., Chicago, Ill.	'25
Fletcher, William G., Supt. of Mines, Inland Collieries Co.....	Indianola, Pa.	'28
Flinn, Alfred D., Sec., United Engineering Society & Dir., Engineering Foundation,	29 W. 39th St., New York, N. Y.	'21
†Floyd, F. W., Geol., The Carter Oil Co.....	Box 2045, Tulsa, Okla.	'21
Flynn, A. E., Prof. of Min., Nova Scotia Tech. College.....	Halifax, N. S., Canada.	'19
Flynn, Edmund J., Chem. Engr., Acting Chief, Lithopone Dept., New Jersey Zinc Co. of Pa.	Palmerton, Pa.	'29
Flynn, Francis Edward, Asst. Supervisor, Pennsylvania Railroad, Supervisor's Office,	Trafford, Pa.	'28
Flynn, Francis N., Met., Bunting Brass & Bronze Co.....	Toledo, Ohio.	'98
Focht, Louis, Chief Engr., State Board of Taxes & Assessment,	State Office Bldg., Trenton, N. J.	'24
Foester, Hallard W., Min. Engr.....	3429 Bisbee St., El Paso, Tex.	'15
Fohl, William E., Cons. Min. Engr.....	1209 House Bldg., Pittsburgh, Pa.	'14
Fohs, F. Julius, Cons. Oil Geol.....	Suite 1207-8-9, 51 E. 42nd St., New York, N. Y.	'01
Fokker, Ir Anthony, Mngng. Dir. of Billiton Maatschappij,	Prinsessegracht 21, The Hague, Holland.	'28
Foley, Charles Bruce, Min. Engr. & Field Geol.....	Box 435, Fort Wayne, Ind.	'13
Foley, Francis B., Supt. of Research, The Midvale Co.....	Nicetown, Philadelphia, Pa.	'19
Folger, Anthony, Oil Geol., Gypsy Oil Co.....	Box 1144, Wichita, Kans.	'19

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†Folk, J. W., Prod. Engr., Biglake Oil Co.....	Texon, Tex.	'30
Follansbee, F. S., Meleroft Coal Co.....	800 Union Trust Bldg., Pittsburgh, Pa.	'20
Folsom, David M., Cons. Engr.....	1109 Hobart Bldg., San Francisco, Cal.	'10
†Fominyh, Michael P.....	422 3rd Ave., Durango, Colo.	'26
FonDersmith, Charles R., Asst. Met., American Rolling Mill Co.....	Middletown, Ohio.	'22
Fonville, Herman Albert, Div. Geol., The Henry L. Doherty Co., 60 Wall St., New York, N. Y.		'27
†Foo, Keat K., Min. Engr., Administrative Dept., Alan Loke Co., Kuala Lumpur, Selangor, F.M.S.		'21
Foot, Arthur B., Gen'l Mgr., North Star Mines Co.....	Grass Valley, Cal.	'05
Foot, Frederick William, Min. Engr., General Chem. Co....	40 Rector St., New York, N. Y.	'20
†Fopeano, Joseph E., U. S. Gypsum Co.....	Gypsum, Ohio.	'29
Foran, John F., Soc. Minera Backus y Johnston del Peru.....	Casapalca, Peru.	'20
Forbes, Carroll R., Prof. of Min., Missouri School of Mines.....	Rolla, Mo.	'13
Forbes, David L. H., Gen'l Mgr., The Teck-Hughes Gold Mines, Ltd., Kirkland Lake, Ont., Canada.		'04
Forbes, Donald G., Min. Engr. & Met.....	Turnworth, Blandford, England.	'94
Forbes, Duncan D., Asst. to V.P., Anaconda Sales Co.....	25 Broadway, New York, N. Y.	'17
Forbes, John J. V., Min. Engr., Chief Engr., Safety Extension Service, U. S. Bureau of Mines, 4800 Forbes St., Pittsburgh, Pa.		'17
Forbes, Paul R., Met.....	712 Prospect Ave., El Paso, Tex.	'95
Forbes, William A., Met.....	Room 1814, 71 Broadway, New York, N. Y.	'13
Ford, Allen P., Met., Crane Co.....	Bridgeport, Conn.	'18
Ford, Homer Davis, Min. Engr., Supt., Gilson Asphaltum Co.....	Watson, Utah.	'23
Fordyce, John R.....	Box 346, Hot Springs, Ark.	'92
Foreman, Charles H., Min. Engr., Hecla Min. Co.....	Burke, Idaho.	'20
Foreman, John F., Min. Engr., Supt., The Shoemaker Coal Min. Co.....	Lilly, Pa.	'24
Foreman, J. T., Asst. Gen'l Mgr., Stith Coal Co.....	America, Ala.	'27
†Forgotson, James M., Geol., Acme Dev. Co.....	713 Frisco Bldg., St. Louis, Mo.	'22
Forman, Herace B., Jr., Engrg. & Constr., Cozine-Warren Co., Inc. 92 Grove St., New York, N. Y.		'25
Forman, John K.....	R.D.2, Phoenix, Ariz.	'14
Forman, Percy Grant, Supt., Columbia Quarry Co.....	1612 Syndicate-Trust Bldg., St. Lou's, Mo.	'20
†Forney, H. C., Asst. Valuation Engr., Interstate Commerce Commission, Room 7, Southern Pacific Bldg., San Francisco, Cal.		'24
Forrest, Charles N., Chem. Engr., Tech. Dir., The Trinidad Lake Asphalt Co., Room 800, 1600 Arch St., Philadelphia, Pa.		'14
Forrest, George Munroe.....	40 W. 55th St., New York, N. Y.	'20
Forrester, R. Desmond.....	Ivy Cottage, Sonning, Berks, England.	'26
†Forrester, William A., Jr., Industrial Buying Dept., National City Co., National City Bank Bldg., 55 Wall St., New York, N. Y.		'29
†Forster, Albert E., Service Div., Hercules Powder Co.....	Wilmington, Del.	'24
†Forster, W. Leslie, Pet. Engr., The Caribbean Pet. Co.....	Maracaibo, Venezuela.	'29
Forstner, William, Cons. Engr. of Mines.....	855 Pine St., Apt. 1, San Francisco, Cal.	'27
Fort, Michel, Director, School of Engineers.....	Lima, Peru.	'15
Foslie, Steinar, Min. Engr., State Min. Geol., Geol. Survey of Norway, Kronprinsens gt. 8, Oslo, Norway.		'19
Foss, Feodore F., Asst. to Pres., Wheeling Steel Corp., 622 Wheeling Steel Corp. Bldg., Wheeling, W. Va.		'13
Foss, Marion Henry, Min. Engr., Wilson & Co.....	41st & Ashland Ave., Chicago, Ill.	'17
Fossorier, Pierre A., Treas., International Ores & Metals Selling Corp., 60 Broad St., New York, N. Y.		'28
†Foster, Charles B., Jr. Met., Concentration Lab., International Smelt. Co....	Tooele, Utah.	'27
†Foster, Edwin C., Salesman, Aluminum Co. of America, Franklin Trust Bldg., Philadelphia, Pa.		'20
Foster, Ernest D., Economic Geol. & Cons. Atty., Foster Mines, 671 I. W. Hellman Bldg., Los Angeles, Cal.		'27
†Foster, F. Leroy, Instr., Dept. of Min. & Met., Room 8-219, Mass. Inst. of Tech., Cambridge, Mass.		'25
Foster, Howard L., Cons. Engr.....	2230 Buhl Bldg., Detroit, Mich.	'27
Foster, L. Julio, Mgr., Minas y Fundición "La Junta".....	San Bernardo, Chile.	'16
Foster, Philip L., Cons. Min. Engr., The Exploration Co., Ltd. of London, 350 Madison Ave., New York, N. Y.		'96
Foster, R. S., National Lead Co.....	San Martin 235, Buenos Aires, Argentina.	'17
†Foster, Robert Nicholls, Research Chem., Federal Phosphorus Co.....	Anniston, Ala.	'26
Foster, Rufus J., Min. Engr.....	608 Madison Ave., Scranton, Pa.	'90
Foster, Walter Labdon, District Sales Mgr., Russell, Burdsall & Ward Bolt & Nut Co., Pittsburgh, Pa.		'20
Foster, William Henry.....	1150 E. 24th Place, Tulsa, Okla.	'23
Fould, Maurice, Administrateur délégué de la Société des Hauts Fourneaux, Forges & Aciéries de Pompey, 48 Rue La Boétie, Paris, France.		'24

## 52 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

†Fournier, E. Antunes, Asst. Engr., Imperial Irrigation District....	Box 723, Calexico, Cal.	'18
Foutz, G. V.....	133 W. Hortter St., Philadelphia, Pa.	'16
Fovargue, F. H., Min. Engr., The Signal Mountain Portland Cement Co.,	703 Hanover St., Chattanooga, Tenn.	'14
Fowler, Arthur A., Bank & Corp. Dir., Somerset Securities Corp.,	74 Trinity Pl., New York, N. Y.	'18
Fowler, Ernest G., Oil Field Mgr., British Burmah Pet. Co., Ltd.,	Yenangyaung, Burma, India.	'24
Fowler, George M., Cons. Geol.....	314 Joplin National Bank Bldg., Joplin, Mo.	'13
Fowler, Harold W., Gen'l Mgr., Min. Property, Cia. Minera Chontalpan y Anexas, Taxco.	Edo. Guerrero, Mexico.	'18
Fowler, Robert, Blast Furnace Foreman & Asst., The Indian Iron & Steel Co., Ltd.,	Hirapur Iron Works, Burnpore P. O.; Via Asansol, E. I. R., Bengal, India.	'25
Fowler, Samuel S., Min. Engr., Partner, Bluebell Mines.....	Riondel, B. C., Canada.	'92
Fowler, Wallace W., Asst. Smelter Supt., Cerro de Pasco Copper Corp.....	Oroya, Peru.	'22
Fowles, Charles, Min. Engr., Gen'l Mgr., Durango Min. Mill. & Exploration Co.,	Box 4, Hachita, N. M.	'07
Fox, Alfred, Jr., Min. Engr., Messrs. Graham Rowe & Co.,	Cunard Bldg., Liverpool, England.	'05
Fox, Edward G., Asst. Supt., Colonial Colliery Co.....	Natalie, Northumberland Co., Pa.	'25
Fox, John M., Min. Engr.....	Johannesburg, Cal.	'17
Fox, William C., Chief Chem. & Met., Empire Steel Corp.....	Mansfield, Ohio.	'20
Fozard, J. L., V.P. & Gen'l Mgr., Detroit International Bridge Co.,	730 21st St., Detroit, Mich.	'19
†Fraker, George Elmer, Pres., Fraker Coal Co.....	605 Insurance Bldg., Denver, Colo.	'28
Frame, Harry A., Supt., National Products Co.....	1539 So. Yorktown Ave., Tulsa, Okla.	'20
†Franchie, Andre, Min. & Met. Engr., Cotton Belt Mines, Ltd. of Vancouver,	Vancouver, B. C., Canada.	'29
Franchot, Richard, Cons. Chem.....	724 9th St., N. W., Washington, D. C.	'23
Francis, Charles B., Dir., Bureau of Tech. Instruction, Carnegie Steel Co.,	Carnegie Bldg., Pittsburgh, Pa.	'23
Francis, Theodore N., Cerro de Pasco Copper Corp.....	Morococha, Peru.	'24
Francisco, Ferris L., Engr. & Architect.....	511 5th Ave., New York, N. Y.	'23
Frank, Adam G., Mech. Engr., Lehigh Coal & Navigation Co.,	121 E. Ridge St., Lansford, Pa.	'20
Frank, Alfred, Min. Engr., V.P. & Gen'l Mgr., Keystone Min. Co.,	1302 Continental Bank Bldg., Salt Lake City, Utah.	'03
†Frank, John Elden, Surveyman, U. S. Army Engr. Corps, U. S. Army Office,	Canal Park, Duluth, Minn.	'21
†Frank, Robert J., Chem. Engr., Copper Clad Steel Co.....	Braddock P. O., Rankin, Pa.	'21
Frank, William K., V.P., Copperweld Steel Co.....	Glassport, Pa.	'18
Frankel, Samuel, Chief Met., Niagara Falls Smelt. & Refin. Corp.,	2208 Elmwood Ave., Buffalo, N. Y.	'20
Franklin, Frederick H., Met. Chem., Saunders & Franklin,	184 Whittier Ave., Providence, R. I.	'18
Franklin, Nelson, Min. & Met. Mgr.....	823 Munsey Bldg., Washington, D. C.	'18
Frary, Francis C., Dir. of Research, Aluminum Co. of America....	New Kensington, Pa.	'20
Fraser, Alexander, V.P., Asiatic Pet. Co., Ltd.....	65 Broadway, New York, N. Y.	'27
Fraser, Colin, The Broken Hill Associated Smelters Proprietary, Ltd.,	Collins House, Melbourne, Vic., Australia.	'06
†Fraser, G. C., Lawyer.....	49 Wall St., New York, N. Y.	'17
Fraser, H. H., General Delivery.....	Jerome, Ariz.	'21
Fraser, Hugh J., Combustion Engr., International Nickel Co., Inc.	Huntington, W. Va.	'23
Fraser, J. H., Assayer, Buchans Min. Co.....	Buchans, Newfoundland.	'27
Fraser, O. B. J., Research Met., International Nickel Co....	Oak St., Bayonne, N. J.	'18
Fraser, Thomas, Min. Dept., Carnegie Inst. of Tech.....	Pittsburgh, Pa.	'17
Fraser, William A., Engr., Venezuelan Atlantic Refin. Co.,	Box 223, Maracaibo, Venezuela.	'28
Frechette, Howells, Min. Engr., Chief Engr., Ceramics & Road Materials Div., Mines	Branch, Dept. of Mines, Ottawa, Ont., Canada.	'12
Frecheville, Robert James, Min. Engr.....	5 London Wall Bldgs., London, E.C.2, England.	'84
Frecheville, William, Min. Engr., 25 Phillimore Gardens, Kensington, London, W.8, England.		'84
Free, E. E., Cons. Chem. Engr.....	175 Fifth Ave., New York, N. Y.	'17
Freedman, Louis H., Geol.....	901 Burk Burnett Bldg., Fort Worth, Tex.	'23
Freeman, Carlos A., Min. Engr., Asst. Supt., Bethlehem Steel Quarry.....	Steelton, Pa.	'23
Freeman, Gay N., Min. Investment.....	Box 246, Thermopolis, Wyo.	'07
Freeman, John R., Jr., Physicist, Div. of Met., U. S. Bureau of Standards, Washington, D. C.		'19
French, Sidney W., Met. Engr.....	653 N. Robertson Blvd., Sherman, Cal.	'21
†Frenzell, E. H., Champion Sillimanite, Inc.....	Mocalno, Cal.	'20
Fretz, Augustus Henry, Asst. Prof., Geol. Dept., Lehigh Univ.....	Bethlehem, Pa.	'20

For explanation of symbols, see page 5.

†Fretz, Edward S., Pres. & Gen'l Mgr., Light Manufacturing & Foundry Co.,	Pottstown, Pa.	'18
Frevort, Harry L., The Midvale Co.	Box 4445, Nicetown, Philadelphia, Pa.	'22
Frey, Alfred P., Chief Pet. Engr., Cia. "El Aguila", Apt. 86, Puerto Mexico, Vera Cruz, Mex.		'22
Frey, V. M., Cons. Engr.	41 E. Market St., York, Pa.	'17
Frey, Henry J., Min. Engr., Pres., Freyn Engrg. Co., 310 So. Michigan Ave., Chicago, Ill.		'14
Fricker, Cecil O., Asst. Concentrator Supt., Granby Cons. Min. Smelt. & Power Co.,	Anyox, B. C., Canada.	'27
Friedman, A. A., Arizona Metals, Inc.	Kirkland, Ariz.	'27
Friedman, Hyman A., Mine Transitman, Miami Copper Co.	Box 1947, Miami, Ariz.	'27
Friedrich, Alfred K., Min. Engr., Assoc. Prof. Min. Engrg., Chem. & Min. Engrg. Dept.,	Iowa State College, Ames, Iowa.	'15
Friendly, O. N., Chief Engr., Park-Utah Consolidated Mines Co.,	1008 Continental Bank Bldg., Salt Lake City, Utah.	'14
Frigar, Ellis D., Pipe Line Supt., Lago Pet. Corp.	Maracaibo, Venezuela.	'29
Frink, Ellis P., Instructed to hold everything.		'20
Frink, Lester D., Min. Engr.	Apex Hotel, Butte, Mont.	'14
Fritch, G. M., Cons. Met.	766 Penobscot Bldg., Detroit, Mich.	'17
Froehling, Henry, Chem. & Min. Engr.	1800 Hanover Ave., Richmond, Va.	'90
Frolli, Albert W.	1020 Drake Ave., Burlingame, Cal.	'14
†Frost, J. F., Asst. Supt., American Smelt. & Refin. Co.	Hayden, Ariz.	'22
†Frost, Robert B., Plant Engr., Texas Portland Cement Co., 1401 Santa Fe Bldg., Dallas, Tex.		'21
Fry, G. D.	Wallaceburg, Ont., Canada.	'23
Fry, Lawford H., Met. Engr., Standard Steel Works Co.	Burnham, Pa.	'19
Fry, Louis D., Min. Engr., Gen'l Manager, The Mazapil Copper Co., Ltd.,	Saltillo, Coah., Mexico.	'16
Fuchs, Fernando C., Cons. Min. Engr., Prof., Lima School of Mines.	Lima, Peru.	'02
Fuhr, Frank B., Engrg. Dept., Consolidated Min. & Smelt. Co., Ltd.,	Kimberley, B. C., Canada.	'24
Fujii, Choshichiro, Mine Mgr., Yubari Colliery, Hokkaido Colliery & Steamship Co.,	Yubari-Machi, Hokkaido, Japan.	'25
Fujioka, Jokichi, Min. Engr., Dir., Mitsui Min. Co.	1 Surugacho Nihonbashi, Tokyo, Japan.	'07
Fujicka, Jokichi, Min. Engr., Dir., Mitsui Min. Co., 1 Surugacho Nihonbashi, Tokyo, Japan.		'07
Fujita, Heitaro, V.P., Fujita Co., Dojima, Mita-Ku.	Osaka, Japan.	'10
Fukami, Yasushi, Geol., Mitsui Bussan Kaisha, Ltd.	1 Koganemachi, Keijo, Korea.	'23
Fukihara, Yaezo, Min. Engr., Mgr., Mitsubishi Makimine Mine, Higashiusukigun,	Miyazakiken, Japan.	'20
Fuller, George Freeman, Pres., Wyman-Gordon Co.	105 Madison St., Worcester, Mass.	'20
Fuller, James W., Jr., Sec. & Treas., Lehigh Car Wheel & Axle Works.	Catasauqua, Pa.	'94
Fuller, John T., Franklin Fluorspar Co.	City National Bank Bldg., Paducah, Ky.	'09
Fuller, Truman S., Met., Research Lab., General Electric Co.	Schenectady, N. Y.	'20
Fulton, Charles H., Director, Missouri School of Mines.	Rolla, Mo.	'03
Fulton, Chester A., Min. Engr., V.P., Southern Phosphate Corp.,	1100 Garrett Bldg., Baltimore, Md.	'07
Fulton, George R., Engr., Bethlehem Mines Corp.	Box 68, Cornwall, Pa.	'27
Fulton, John A., Min. Engr., Dir., Mackay School of Mines, Univ. of Nevada.	Reno, Nev.	'12
Fulweiler, W. H., Chem. Engr., The United Gas Improvement Co.,	319 Arch St., Philadelphia, Pa.	'20
Furbank, Arthur W.	Instructed to hold everything.	'23
Furber, Percy N., Financier, Trans. Lux Daylight Picture Screen Corp.,	247 Park Ave., New York, N. Y.	'21
Furlong, Joseph, Sales Engr., Allis-Chalmers Mfg. Co.	Milwaukee, Wis.	'19
Furness, James W., Min. Engr., Bureau of Foreign & Domestic Commerce, Dept. of Commerce, Washington, D. C.		'22
Furuichi, Rokuzo, Chief Engr., Sumitomo-Goshikaisha, Kitahama Gochome,	Higashiku, Osaka, Japan.	'19
Furukawa, T., Pres., Furukawa & Co.	1-chome Yaesucho, Kojimachi, Tokyo, Japan.	'08
Fuwa, Kumao, Mgr., Mitsui Tagawa Colliery, Mitsui Mining Co., Ltd.,	Gatoji, Tagawa-gun, Fukuokaken, Japan.	'22
†Fuzita, Yoshiaki, Min. Engr., Mitsui Kamioka Mine, Funatsu, Yoshikigun, Gifuken, Japan.		'22
Gaebelein, Paul W., Factory Mgr., Dodge Bros. Truck Plant.	Stockton, Cal.	'14
Gaethke, Frederick P., Giesche Spolka Akcyjna.	Podgorna 4, Katowice, Poland.	'25
Gaffney, J. B., Chief Engr., Fuller Lehigh Co.	Fullerton, Pa.	'19
Gahagen, Samuel Musser, Special Steel Dept., Joseph T. Ryerson & Son, Inc., Chicago, Ill.		'23
Gahl, Rudolf, Cons. Met.	1155 Laurel St., Berkeley, Cal.	'08
Gaines, A. M., V.P. & Gen'l Mgr., The New Chicago Mine Corp., Inc.	Picher, Okla.	'21
†Gaines, John M., Jr.	41 Bowdoin St., Cambridge, Mass.	'27
Galbreath, Royer E., Min. Engr., Chief Engr., Wisconsin Steel Co.	Benham, Ky.	'21
Gale, Hoyt S., Geol.	1775 Hill Dr., Los Angeles, Cal.	'20



†Gallagher, David.....	349 Clark Rd., Brookline, Mass.	'28
†Gallagher, Robert T., Min. Engr., Johnstown Div., Bethlehem Mines Corp., Johnstown, Pa.		'27
†Gallagher, William G., Jr., Chief Geol., Rocky Mountain Div., Union Oil Co. of California,	Box 571, Fort Collins, Colo.	'27
Gallus, Fred S., District Stripping Supt., Lehigh Coal & Navigation Co....	Lansford, Pa.	'20
Gallwey, Harry A., Gen'l Mgr., B. A. & P. Ry. Co.....	Anaconda, Mont.	'05
Galvin, John E., Pres., The Ohio Steel Foundry Co.....	Lima, Ohio.	'19
Gambold, Thomas R., Colliery Supt., Lehigh & Wilkes-Barre Coal Co.,	Maxwell 20 Colliery, Ashley, Pa.	'21
Gambrill, George T., Jr., Dist. Plant Supt., The Barrett Co.....	Fairfield, Ala.	'07
Gandrud, B. W., Assoc. Met., U. S. Bureau of Mines.....	University, Ala.	'27
†Gandy, Harry L., Executive Sec., National Coal Assn., Southern Bldg., Washington, D. C.		'27
†Gann, John A., Met., Dow Chemical Co.....	Midland, Mich.	'20
†Ganter, George A.....	73 Valencia Ave., West New Brighton, Staten Island, New York.	'18
†Gantz, Gardner, Roxana Pet. Corp.....	Box 66, Pyote, Tex.	'20
Garber, C. Y., Asst. Mill Supt., Bunker Hill & Sullivan Min. & Concentrating Co.,	Kellogg, Idaho.	'21
Garcia, Adolfo, Min. Engr. ....	8a, Cipres 239, Mexico City, D.F., Mexico.	'22
Garcia, John A., Cons. & Constr. Engr., Allen & Garcia Co.,	Suite 1743, McCormick Bldg., 332 S. Michigan Ave., Chicago, Ill.	'21
†Garcia, Maximo Pascua, Student, Univ. of Pittsburgh, School of Mines,	Box 76, Oakland Sta., Pittsburgh, Pa.	'29
Garcia, Roberto, Min. Engr., Bodegas "El Globo," Ltd.....	San Juan, F.C.P., Argentina.	'21
Gardescu, Ionel I., Mellon Institute.....	Thackeray & O'Hara Sts., Pittsburgh, Pa.	'23
Gardiner, Chester M., Pet. Engr. & Geol.....	Box 67, Roscoe, Cal.	'22
Gardiner, Robert, Supt., Cresson Mine, Cresson Cons. Gold Min. & Mill Co.,	Cripple Creek, Colo.	'24
Gardner, Darrell, Magma Copper Co.....	Superior, Ariz.	'25
Gardner, E. D., Supervising Engr., Southwest Experiment Sta., U. S. Bureau of Mines,	Tucson, Ariz.	'12
Gardner, Frank, Chief Engr., Simms Oil Co.....	Dallas, Tex.	'26
Gardner, James H., Pres., Gardner Pet. Co.....	326 Tulsa Trust Bldg., Tulsa, Okla.	'17
Gardner, Percy Scoville, Pres., American Rheolaveur Corp., & V.P., Shamokin Coal Co.,	120 Broadway, New York, N. Y.	'27
†Gardner, Percy S., Jr., Colorado School of Mines.....	Golden, Colo.	'28
Gardner, Royal Duncan, Cons. Engr.....	1067 E. 4th S. St., Salt Lake City, Utah.	'19
Garfias, Valentin Richard, Mgr., Foreign Oil Dept., Henry L. Doherty & Co.,	60 Wall St., New York, N. Y.	'19
Garfield, Alexander S.....	173 Bd. Haussmann, Paris, 8 <sup>e</sup> , France.	'05
Garlock, Guy M., The New Jersey Zinc Co.....	160 Front St., New York, N. Y.	'16
Garner, A. Hamilton, Cons. Geol., Partner, Brokaw, Dixon, Garner & McKee,	120 Broadway, New York, N. Y.	'17
Garner, Carroll A.....	210 N. Laurel St., Hazleton, Pa.	'17
Garnett, Thomas H., Engr., Empire Zinc Co.....	Gilman, Colo.	'17
†Garnier, Erik U., Dixie Oil Co., Inc.....	Philcade Bldg., Tulsa, Okla.	'28
Garratt, Frank, Universal Steel Co.....	Bridgeville, Pa.	'17
Garrett, Melvin M., Geol.....	231 33 Harvey-Snyder Bldg., Wichita Falls, Tex.	'20
Garrett, S. G.....	604 Atlas Life Bldg., Tulsa, Okla.	'17
Garrey, George H., Cons. Geol. & Min. Engr.....	501 Bullitt Bldg., Philadelphia, Pa.	'05
Garrido, Manuel F., Cons. Min. Engr.....	2 a Orizaba, 28, Mexico City, D.F., Mexico.	'18
Garrison, F. Lynwood, Min. Engr. & Geol.....	1019 Clinton St., Philadelphia, Pa.	'83
Garrison, Rupert, Min. Engr., Pres., Wilmont Madison Co., Inc.....	Virginia City, Mont.	'28
Garthwaite, E. H., Cons. Min. Engr.....	1476 Scenic Ave., Berkeley, Cal.	'82
Gartrell, Herbert W., Min. Engr., Lecturer on Min. Engrg., Univ. of Adelaide,	Adelaide, S. Australia.	'07
Gartside, A. E., Chem., National Lead Co.....	1009 Clark Ave., St. Louis, Mo.	'21
Gartung, F. H., Min. Engr., Gen'l Supt., Kansas Mines, Commerce Min. & Royalty Co.	Miami, Okla.	'16
Garvey, M. L., Gen'l Mgr., The New River Co.....	Macdonald, W. Va.	'22
Garza Aldape, J. M., Compania Minera del Cubo, S. A.,	Apt. 49, Guanajuato, Gto., Mexico.	'24
Gatch, Elias S.....	Room 941, Planters Bldg., St. Louis, Mo.	'04
Gates, Arthur O., Min. and Mech. Engr.....	415 Dooley Block, Salt Lake City, Utah.	'13
†Gates, Lloyd H., Geophysics-Torsion Balance, District Chief, Creole Pet. Corp.,	Apt. 85, Maracaibo, Venezuela.	'29
Gates, William, Sec., H. C. Frick Coke Co.....	1321 Carnegie Bldg., Pittsburgh, Pa.	'29
Gathmann, Emil, Mech. Engr., Pres., The Gathmann Engrg. Co.,	1300 Garrett Bldg., Baltimore, Md.	'13
Gaudin, A. M., Research Prof. of Ore Dressing, Montana State School of Mines	Butte, Mont.	'21
Gaul, John C., Asst. Gen'l Supt., Bell Mine, Anaconda Copper Min. Co.....	Butte, Mont.	'17

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†Gaw, Harold P., Open Hearth Dept., American Rolling Mill Co.....	Middletown, Ohio.	'27
Gawthrop, Robert M., Chief Geol., Prairie Oil & Gas Co., 816 Exchange National Bank Bldg., Tulsa, Okla.		'19
Gay, Harold S., Min. Engr., Examining Engr., Cia. Real del Monte y Pachuca, Pachuca, Hgo., Mexico.		'17
Gay, J. Leeper, Geol.....	Santa Anna, Tex.	'27
Gayford, Ernest, Met., Sec., General Engineering Co.....	Salt Lake City, Utah.	'11
†Gayley, H. Clifford, V.P., Chrome Steel Wks.....	Carteret, N. J.	'23
Gazzam, Joseph P., Min. Engr.....	4944 Lindell Blvd., St. Louis, Mo.	'84
†Geach, William, Ore & Metal Importer, Pres., Watson, Geach & Co., Inc., 57 William St., New York, N. Y.		'24
†Gealy, Wendell B., Pet. Geol., Gulf Oil Cos.....	Frick Bldg. Annex, Pittsburgh, Pa.	'26
Gearhart, Frank B., Supt. of Mfg., The New Jersey Zinc Co. of Pa.....	Palmerton, Pa.	'14
Geary, James Frank, Chief Engr., Riverside Cement Co.....	Riverside, Cal.	'27
Gee, J. Emerson, Cons. Engr.....	211 S. Berendo St., Los Angeles, Cal.	'03
Geiger, Arthur W., Min. Engr., University Club.....	San Francisco, Cal.	'06
Geis, W. H., Geol.....	731 Roosevelt Bldg., Los Angeles, Cal.	'21
Geise, William B., Div. Engr., Susquehanna Collieries Co.....	Shamokin, Pa.	'19
Geisendorfer, H. A., Mgr., Walker Min. Co.....	Spring Garden, Plumas Co., Cal.	'18
Geismer, Henry S., Cons. & Sales Engr., Keiser-Geismer Engrg. Co.....	Birmingham, Ala.	'08
Geither, Edward C., Mgr., Ingersoll-Rand Co. of Illinois, 360 N. Michigan Ave., Chicago, Ill.		'23
Gemmill, David B., Pres., Prince Cons. Min. Co., 1210 Detwiler Bldg., Los Angeles, Cal.		'17
Gennet, Charles W., Jr., V.P., Sperry Rail Service Corp., Room 452, Railway Exchange Bldg., 80 E. Jackson Blvd., Chicago, Ill.		'11
Gensamer, Maxwell, Asst. Met., Bureau of Metallurgical Research, Carnegie Inst. of Tech. Pittsburgh, Pa.		'25
Gensheimer, Jean, Asst. Supt., Metal & Thermit Corp., 151st St. & McCook Ave., E. Chicago, Ind.		'27
Gentil, Eugene, Engr., Compagnie de Saint-Gobain, 1 bis Place des Saussaies, Paris, 8e, France.		'20
Gentry, Glenn G., Min. Engr., Gen'l Supt., The Moffat Tunnel Commission, West Portal, Colo.		'27
Gentry, M. B., Min. Engr., Allied Chem. & Dye Corp., 32nd Floor, 61 Broadway, New York, N. Y.		'17
Geohegan, L. E., Asst. Gen'l Mgr., Gulf States Steel Co., 1029 Brown Marx Bldg., Birmingham, Ala.		'16
George, Harold C....	Box 103, Faculty Exchange, University of Oklahoma, Norman, Okla.	'19
George, Harry S., Research Engr. (Met.), Union Carbide & Carbon Research Labs., Inc., Thompson Ave. & Manley St., Lond Island City, N. Y.		'21
George, P. W., Supt., Federal Min. & Smelt. Co.....	Baxter Springs, Kans.	'11
George, Russell D., Head, Dept. of Geol., Univ. of Colorado & State Geol. of Colorado, Boulder, Colo.		'02
Geppert, Richard M., Min. Engr., Selection Trust Bldg., Mason's Ave., Coleman St., London, E. C. 2, England.		'02
Gerhard, J. W., V.P., Southern Acid & Sulphur Co.....	Rialto Bldg., St. Louis, Mo.	'17
Gerhauser, William.....	8100 Jefferson Ave. E., Detroit, Mich.	'88
Geringer, G. T., Min. Engr.....	Aroroy, Masbate, P. I.	'17
†Germain, Leonard, Min. Geol. & Chem. Engr.....	634 Querbes Ave., Montreal, Que., Canada.	'26
Germany, Eugene Ben, Geol. & Producer of Oil, Cranfill, Reynolds & Germany, 1013 Commerce St., Dallas, Tex.		'27
Gerner, George C., Met., The Miller Co.....	Meriden, Conn.	'20
†Gero, W. B., Chem. Engr., Westinghouse Lamp Co.....	Bloomfield, N. J.	'18
†Gerson, Harold S.....	Livingston Hall, Columbia Univ., New York, N. Y.	'29
Gester, G. C., Chief Geol., Standard Oil Co. of Cal., 1112 Standard Oil Bldg., 225 Bush St., San Francisco, Cal.		'18
Getchell, Noble Hamilton, Gen'l Mgr., Betty Oneal Mines & Gold Circle Cons. Mines Co., Betty Oneal, Nev.		'22
†Gumelek, R. M. H., Asst. Mgr., Gold Crown Silver Min. Co.....	Cleator, Ariz.	'19
Gholz, A. L.....	3005 James Ave. So., Minneapolis, Minn.	'17
Gianella, Vincent P., Asst. Prof. of Geol., Mackay School of Mines, Univ. of Nevada, Reno, Nev.		'21
†Gibbons, C. A., Supt., Mine 8, Pittsburgh Terminal Coal Corp.....	Coverdale, Pa.	'28
Gibbs, C. Willard, Gen'l Mgr., Harwick Coal & Coke Co.....	Harwick, Pa.	'21
Gibbs, Harley S., Student of Pet. Geol., Oil & Gas Bldg., Univ. of Pittsburgh, Pittsburgh, Pa.		'29
Gibson, C. B., Industrial Div., Westinghouse Electric & Mfg. Co., 18th Floor Grant Bldg., 310 Grant St., Pittsburgh, Pa.		'20
Gibson, Fred D., Chem., Globe Smelter, American Smelt. & Refin. Co.....	Denver, Colo.	'23
Gibson, James C., Min. Engr., Wheeling Steel Corp.....	Wheeling, W. Va.	'23

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# 56 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Gibson, John, Jr., Pres., Penn Smokeless Coal Co.....	815 Berger Bldg., Pittsburgh, Pa.	'20
Gibson, Lloyd C., Chief Oil & Gas Valuation Engr., Income Tax Unit, U. S. Treasury Annex No. 2, Washington, D. C.		'21
Gibson, Neil M., Field Engr., Bethlehem Steel Co.....	Bethlehem, Pa.	'20
Gibson, Thomas W., Deputy Minister of Mines, Province of Ontario, Parliament Bldg., Toronto, Ont., Canada.		'01
Gibson, William A., Works Mgr., Bradley Pulverizer Co., 123 So. Third St., Allentown, Pa.		'24
Gidel, Murl H., Geol., Anaconda Copper Min. Co.....	526 Hennessy Bldg., Butte, Mont.	'13
Gieser, Herbert S.....	El Molino, Son., Mexico, Via Douglas, Ariz.	'27
Gifford, Roe Wesley, Braden Copper Co.....	Rancagua, Chile.	'24
Gigurtu, Ion P., Engr. & Managing Director, Mica Min. Co., Str. Benito Mussolini 36, Bucharest 111, Romania.		'28
Gilbert, D. C.....	The Belvedere, Salt Lake City, Utah.	'29
Gilbert, Frederick C., Prof. of Met., Montana School of Mines.....	Butte, Mont.	'29
Gilbert, Geoffrey.....	30 Chestnut Park, Toronto 5, Ont., Canada.	'25
Gilbert, James Cornelius, 475 Associated Oil Bldg., 79 New Montgomery St., San Francisco, Cal.		'21
†Gilbert, John, Sec., Madeira Hill & Co.....	260 So. Broad St., Philadelphia, Pa.	'23
Gilbertson, H. S., Dir. of Personnel, Lehigh Coal & Navigation Co.....	Box C, Lansford, Pa.	'25
Gilchrist, Percy C., Met., Reform Club.....	Pall Mall, London, England.	'96
Giles, Albert W., Prof. of Geol., Univ. of Arkansas.....	Box 112, Univ. Sta., Fayetteville, Ark.	'25
†Gilkey, N. F., Pres., Channel Concentrating Co.....	Juneau, Alaska.	'28
Gill, Donald, Min. Engr.....	Fort Jameson, No. Rhodesia, Africa.	'26
Gill, Fred A., Pres., Gill Rock Drill Co.....	Lebanon, Pa.	'30
Gill, James P., Met., Vanadium-Alloys Steel Co.....	Latrobe, Pa.	'25
Gill, Philip L., Met. Engr., Partner, Rutter & Co.....	14 Wall St., New York, N. Y.	'15
Gill, W. H., Mgr., Zinc Smelter, National Zinc Co.....	Bartlesville, Okla.	'21
Gillan, Silas L., Min. Engr. & Geol.....	812 Subway Terminal Bldg., Los Angeles, Cal.	'23
Gillen, Raymond J., Union Drawn Steel Co., Met. Dept.....	Beaver Falls, Pa.	'24
Gilles, V. A., Min. Engr., Asst. Chief Geol., Northern Pacific Ry. Co., Securities Bldg., Billings, Mont.		'21
Gillespie, J. M., V.P., Lockhart Iron & Steel Co.....	Box 1243, Pittsburgh, Pa.	'29
Gillespie, Thomas H., Chairman & Pres., T. A. Gillespie Co.; East Jersey Pipe Co. & Domestic Stoker Co., 7 Dey St., New York, N. Y.		'21
Gillett, H. W., Director, Battelle Memorial Institute.....	505 King Ave., Columbus, Ohio.	'18
Gillette, G. Marshall, Gen'l Mgr., Pennsylvania Coal Co.; Hillside Coal & Iron Co., Box 553, Scranton, Pa.		'15
Gilley, J. G.....	3417 South 3rd St., Ironton, Ohio.	'22
Gillie, John, Min. Engr.....	Box 278, Butte, Mont.	'87
Gillie, Percy, Safety Dir., Kingston Pocahontas Coal Co., Inc.....	Hemphill, W. Va.	'25
Gillies, Donald B., V.P., The McKinney Steel Co.....	3100 E. 45th St., Cleveland, Ohio.	'22
Gillies, Frederick Montague, Roll. Mill Supt., Inland Steel Co.....	Indiana Harbor, Ind.	'26
Gillies, Whitford C., Stock Broker, Otis & Co.....	126 W. Congress St., Detroit, Mich.	'28
Gillis, Julius H.....	425 Riverside Dr., New York, N. Y.	'17
Gillmor, R. Niles, Research Met., Flotation Lab., International Smelt. Co.....	Tooele, Utah.	'28
Gillson, Joseph L., Assoc. Prof. of Economic Geol., Dept. of Geol., Northwestern Univ., Evanston, Ill.		'23
Gilman, C. Edward, Cons. Engr.....	336 Mills Bldg., San Francisco, Cal.	'07
Gilman, George H., Pres., Gilman Mfg. Co.....	East Boston, Mass.	'17
Gilman, Walter, Min. Engr., Edward V. d'Invilliers Engrg. Co., 121 No. Broad St., Philadelphia, Pa.		'14
Gilmore, Luther E., Met., Crane Co.....	Chicago, Ill.	'14
Gilmour, Andrew, Geophysicist, Amerada Pet. Corp.....	Pet. Bldg., Tulsa, Okla.	'29
Gilyard, Alvin L., Cia. Minera Asarco S. A., Unidad Veta Grande....	Parral, Chih., Mexico.	'29
GIOLITTI, FEDERICO, Bessemer Gold Medallist, British I. & S. Inst., 1919, Gen'l Mgr., Aosta Steel Wks. Co., Via Ottavio Revel 20, Torino, Italy.		'15
†Girard, F. J.....	5571 Taft Ave., Oakland, Cal.	'19
Girdler, Tom Mercer, Otis & Co.....	Cleveland, Ohio.	'26
Giroux, Frank W., The Tejon Co.....	Gleeson, Ariz.	'07
Girvin, Willard S., Asst. Met., The American Brass Co.....	Waterbury, Conn.	'17
Gisriel, J. Walter, Jr., Met., Maryland Brass & Metal Wks., Calvert & Federal Sts., Baltimore, Md.		'26
Gisselberg, V. E., New York Honduras Rosario Min. Co.....	San Juanito, Honduras, C. A.	'25
Gittins, Arthur W., Supt., Open Hearth & Blast Furnace Depts., Pittsburgh Crucible Steel Co., Midland, Pa.		'13
Given, Ivan A., Editorial Staff, Coal Age, McGraw-Hill Publishing Co., Inc., 10th Ave. & 36th St., New York, N. Y.		'24
†Given, Paul A., Min. Engr.....	Independence, Inyo Co., Cal.	'27
Gladkov, V., Min. Engr.....	1503 Cedar St., Berkeley, Cal.	'24
†Glaeser, Oscar A., Ventilation Engr., United Verde Copper Co.....	Jerome, Ariz.	'20
Glasgow, Charles M., Min. Engr.....	1940 Broadway, Denver, Colo.	'26

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Glasgow, Walter H., Sec. of Mines, Commonwealth of Pennsylvania,	Capitol Bldg., Harrisburg, Pa.	'28
Glass, Alexander, Chairman, Wheeling Steel Corp.	.....Wheeling, W. Va.	'25
Gleason, William P., Gen'l Supt., Illinois Steel Co., Gary Works	.....Gary, Ind.	'21
Glenn, Leonidas C., Cons. Geol., Prof. of Geol., Vanderbilt Univ.	.....Nashville, Tenn.	'00
Glidden, J. T., Min. Engr., Beresford & Glidden	.....Calle Comercio No. 30, La Paz, Bolivia.	'16
Glinz, Karl, Professor fur Bergbau, Aufbereitungs-und Brikettierkunde an der Technischen Hochschule, Charlottenburg, Str. 170, Berlin, Germany.	.....	'29
Globe, A. R.	.....512 Imperial Bldg., Hamilton, Ont., Canada.	'15
Glomb, Walter H., Engr., Hardinge Co.	.....York, Pa.	'21
Glover, Donald K.	.....Kaska, Pa.	'21
Glover, Sheldon L., Geol.	.....1402 E. 63rd St., Seattle, Wash.	'24
Glyachenkoff, Sergei M.	.....614 r. 3, Zeleni Bazar, Harbin, China.	'29
Gobus, Alexander, Met., Dept. of Research, American Car & Foundry Co.,	30 Church St., New York, N. Y.	'29
Godat, Edward A., Jr., Cerro de Pasca Copper Corp.	.....Oroya, Peru.	'29
Goddard, Charles Chase, Jr., Asst. Min. Engr., Engrg. Dept., Anaconda Copper Min. Co.,	511 Hennessey Bldg., Butte, Mont.	'27
Goddard, John N., Assayer & Chem.	.....Calle Aldama No. 10F, Chihuahua, Chih., Mexico.	'17
+Godley, George McM.	.....40 West 40th St., New York, N. Y.	'98
Godshalk, E. G.	.....Blackwell, Okla.	'15
Godshall, L. D., Min. Engr., Met., V.P., Charge of Operations, Tecopa Cons. Min. Co.,	Tecopa, Cal.	'94
Godwin, William	.....Address Wanted.	'22
Goeffer, Fred B., Cordova & Cia.	.....Estacion Dimas, Sin., Mexico.	'12
Goff, I. N., Research Met., Inland Steel Co.	.....Indiana Harbor, Ind.	'29
Gohn, George Rice, Student, Columbia Univ.	.....New York, N. Y.	'28
Gohring, W. B., Min. Engr., American Min. Congress, Arizona Chapter,	419 Heard Bldg., Phoenix, Ariz.	'16
Golberg, Julius, Met. Engr., Brandenburgischestrasse 54, Wilmersdorf, Berlin, Germany.	.....	'07
Gold, John D., Chief Met., Met. Dept., Weirton Steel Co.	.....Weirton, W. Va.	'22
Goldbeck, Albert T., Dir., Bureau of Engrg., National Crushed Stone Assn.,	Merchandise Bldg., 14th & S Sts., N.W., Washington, D. C.	'28
+Goldberg, S. B., Dist. Min. Engr.,	Cia. Minera Real del Monte y Pachuca, Pachuca, Hgo., Mexico.	'21
+Golsan, Bernard E.	.....5 Rue Pillet-Will, Paris, France.	'21
Goncalves, Julio S.	.....Instructed to hold everything.	'28
Gonser, Bruce W., American Smelt. & Refin. Co.	.....Omaha, Neb.	'27
Gonzalez Alcala, Jose L., Geol. Engr.	.....Ave. Insurgentes 490, Mexico City, Mexico.	'28
Gonzalez Barbosa, Leonides, Min. Engr., Avalos Unit,	Cia. Minera de Penoles, Avalos, Zac., Mexico.	'28
Good, David M., Civil, Min. & Cons. Engr.	.....Williamson, W. Va.	'19
Good, George M. H., Min. Engr.	.....Osceola Mills, Pa.	'87
Good, John L., Gen'l Mgr., Eagle-Picher Lead Co., Hillsboro Plant.	.....Hillsboro, Ill.	'29
Good, R. C., Met., Electro Met. Sales Corp.	.....816 Oliver Bldg., Pittsburgh, Pa.	'28
Goodale, George S., Gen'l Supt., Victory Fluorspar Min. Co.	.....Elizabethtown, Ill.	'30
Goodale, Stephen L., Prof. of Met., Univ. of Pittsburgh.	.....Pittsburgh, Pa.	'04
Goode, E. Noel, c/o Australian Iron & Steel, Ltd., Port Kembla, N. S. W., Australia.	.....	'11
Goodearle, Harold L., Supt., Continental Plant, North American Clay Co.	.....Langley, S. C.	'26
+Goodhue, Allan E., V.P., Chicago Pneumatic Tool Co.	.....6 East 44th St., New York, N. Y.	'24
+Goodier, Benjamin D., Mgr., Manganese & Fluorspar Prod. Corp.	.....Silver City, N. M.	'21
Goodloe, Meade, Min. Engr.	.....1830 West Slauson Ave., Los Angeles, Cal.	'96
Goodloe, Thomas Meade, Jr.	.....Flin Flon, via The Pas, Man., Canada.	'28
Goodner, Ivan E., Cons. Engr., Mgr., Washington Headquarters, Los Angeles Chamber of Commerce & Pres., Consolidated Gold Fields of New Mexico, Inc.,	National Press Bldg., Washington, D. C.	'20
+Goodrich, Charles C.	.....17 East 42nd St., New York, N. Y.	'14
+Goodrich, David M., Banker.	.....17 East 42nd St., New York, N. Y.	'14
Goodrich, H. B., Pet. Geol. & Engr.	.....1628 South Cincinnati Ave., Tulsa, Okla.	'12
Goodrich, Harry C., Chief Engr., Utah Copper Co.,	1409 Deseret Bank Bldg., Salt Lake City, Utah.	'15
Goodrich, Paul K., Student, Oklahoma Univ.	.....521 West Eufoula Norman, Okla.	'29
Goodspeed, George Edward, Jr., Asst. Prof. of Geol., Univ. of Washington.	Seattle, Wash.	'14
Goodwin, Guy L., Mgr., Pinal Dome Corp.,	850 Subway Terminal Bldg., 417 South Hill St., Los Angeles, Cal.	'21
Goodwin, James A., British Controlled Oilfields, Ltd.	San Fernando, Trinidad, B. W. I.	'19
Goodwin, Robert H., Min. Engr.	Box 900, Auckland, New Zealand.	'06
Goransson, Karl F., Met.	.....Sandviken, Sweden.	'01
Gordon, A. R., V.P. & Gen'l Mgr., New York & Honduras Rosario Min. Co.,	San Juancito, Honduras, C. A.	'11

Gordon, David M., Engr., Braden Copper Co.....	Caletones, Rancagua, Chile.	'25
Gordon, Dugald, Geol., Brokaw, Dixon, Garner & McKee, Room 521, Slattery Bldg., Shreveport, La.		'20
Gordon, R. W., V.P. & Gen'l Mgr., The Stearns-Roger Mfg. Co., 1720 California St., Denver, Colo.		'19
Gordon, William D. ....	82 Wall St., New York, N. Y.	'96
Gore, Bancroft, Met. ....	Rapid City, S. D.	'14
Gormly, S. J., Min. Engr. ....	816 South Second St., Alhambra, Cal.	'00
Gose, William M., Min. Engr. ....	Gate City, Va.	'20
Goss, Edward O., Pres., Scovill Mfg. Co. ....	Waterbury, Conn.	'94
Goss, Wesley P., Chief Efficiency Engr., United Verde Copper Co., Box 671, Jerome, Ariz.		'21
Gottsberger, B. Britton, Cons. Engr., Centrifugal Pipe Corp., 15 Exchange Pl., Jersey City, N. J.		'01
Goubkin, Serge I., Mining Academy. ....	Kaloojskaja 14, Moscow, U. S. S. R.	'28
Goubkine, Ivan M., Pres., Mining Academy. ....	B. Kaloojskaja, 14, Moscow, U. S. S. R.	'13
Goudkoff, Paul P., Cons. Geol., Microscopic Correlation of Oil-Bearing Formation, 1222-1224 Subway Terminal Bldg., Los Angeles, Cal.		'22
Gould, Charles N., Geol. Engr., Dir., Oklahoma Geol. Survey, Faculty Exchange, Norman, Okla.		'15
Gould, H. W., Min. & Met. Engr., H. W. Gould & Co., 762 Mills Bldg., San Francisco, Cal.		'20
Gould, Kingdom. ....	165 Broadway, New York, N. Y.	'21
Gow, Paul A., Mgr., Tuolumne Copper Min. Co. ....	Butte, Mont.	'15
Gowen, Justin B., Jr., Geol. ....	Giesche Spolka Akcyjna, Katowice, Poland.	'21
†Gower, Harrison P., Asst. Supt. of Mines, Pacific Coast Borax Co. ....	Ryan, Cal.	'21
Gower, William B., Certified Public Acct. ....	111 Broadway, New York, N. Y.	'24
Grace, E. G., Pres., Bethlehem Steel Corp. ....	Bethlehem, Pa.	'12
†Grace, W. R., V.P., Publicity Dept., Ingersoll-Rand Co., 11 Broadway, New York, N. Y.		'15
Grady, W. H., Cons. Coal Min. Engr., Whitney & Kemmerer, 143 Liberty St., New York, N. Y.		'15
Graber, Charles Karsner. ....	3411 Ridge Ave., Philadelphia, Pa.	'21
Graff, Edward, Min. Engr., The New River Co. ....	Macdonald, Fayette Co., W. Va.	'27
Graff, Wilbur W., Supt., Negaunee & Gwinn Dist. Mines, The Cleveland-Cliffs Iron Co., Negaunee, Mich.		'15
Graham, A. Kenneth, Cons. Chem. Engr., Instructor in Chem. Engrg., Harrison Laboratory, Univ. of Pennsylvania, 34th & Spruce Sts., Philadelphia, Pa.		'28
Graham, Albert D., Mgr., Quemahoning Coal Co. ....	Somerset, Pa.	'29
Graham, E. R. ....	Box 428, Pensuoco, Fla.	'15
Graham, Ernest E., The United Mines Co. ....	Apt. 33, Guanajuato, Gto., Mexico.	'25
Graham, Ernesto L., Junior Met. Engr., Caracoles Tin Co. of Bolivia, Casilla 674, La Paz, Bolivia.		'23
Graham, Horace R., Min. Engr., V.P. & Gen. Mgr., Caracoles Tin Co. of Bolivia, Casilla 674, La Paz, Bolivia.		'19
Graham, S. C., Oil Producer, Graham Loftus Oil Co., 522 Security Bldg., Los Angeles, Cal.		'21
Graham, Stanley N., Prof. of Min. Engrg., Queens Univ. ....	Kingston, Ont., Canada.	'06
Graham, Walter F., Tech. Dept., The Ohio Brass Co. ....	Mansfield, Ohio.	'15
Grammont, Francois, Engr., Acting Dir., Etablissements Industriels de E.-C. Grammont et Alexandre Grammont, 10, Rue d'Uzes (2e), Paris, France.		'20
Graney, Patrick Clifford, Gen'l Mgr., C. C. B. Smokeless Coal Co. ....	Mount Hope, W. Va.	'19
Granger, Henry G., Mfr., Mineralized Health Candy. ....	Buskirk, N. Y.	'95
Granger, Isaac William, Asst. Colliery Supt., Hudson Coal Co. ....	Plymouth, Pa.	'27
Grant, Lester E., Gen'l Mgr., Braden Copper Co. ....	Rancagua, Chile.	'15
Grant, Lester Strickland, Mgr., McElroy Ranch Co. ....	Box 338, Odessa, Tex.	'15
Grant, R. C., Prospector, Forminiére. ....	42 Rue Royale, Brussels, Belgium.	'24
Grant, Robert J., Min. Engr., Director of the Mint. ....	Washington, D. C.	'99
Grant, U. S., Geol., Prof. of Geol., Northwestern Univ. ....	University Hall, Evanston, Ill.	'21
Grant, Wheadon M., Min. Engr., American Smelt. & Refin. Co., Room 3422, 120 Broadway, New York, N. Y.		'21
Grant, Wilbur H., Cons. Min. & Geol. Engr., Room 1209, 582 Market St., San Francisco, Cal.		'19
Grasty, J. Sharshall, Geol. Engr. ....	Box 458, Charlottesville, Va.	'06
Graton, L. C., Prof. of Min. Geol., Harvard Univ. ....	Rotch Bldg., Cambridge, Mass.	'06
Gravatt, C. Marshall, Brock & Weymouth. ....	1607 Walnut St., Philadelphia, Pa.	'17
Gravely, Julian Stuart, Chief Engr., Winchester Repeating Arms Co. ....	New Haven, Conn.	'22
Graves, James C., Pres., Saginaw Prospecting Co. ....	Box 326, Saginaw, Mich.	'27
†Graves, William Hagerman, Jr., Swedish American Prospecting Corp., 12th Floor, 26 Beaver St., New York, N. Y.		'29
Gray, Arthur W., Assoc. Dir. of Research, The Brown Instrument Co., Wayne Junction, Philadelphia, Pa.		'18
†Gray, Daniel M., Chem. Engr., Wheeling Plant, Hazel-Atlas Glass Co., 19th & Jacobs Sts., Wheeling, W. Va.		'27
Gray, Edwin F., Gray Min. Co. ....	Contact, Nev.	'04
Gray, George Wynter. ....	3, Lombard St., London, E.C.3, England.	'20

Gray, James H., Min. Engr.....	2 Rue de Franqueville, Paris 16e, France.	'07
Gray, Jesse A., Pet. Engr., Gypsy Oil Co.....	Pearson, Okla.	'27
*Gray, John Pinkham, Attorney at Law.....	Coeur d'Alene, Idaho.	'19
Gray, Lloyd L., Teaching Asst., Faculty Exchange, Univ. of Oklahoma....	Norman, Okla.	'27
*Gray, W. A., Jr., Pet. Refinery Engr., Foster-Wheeler Corp.,	165 Broadway, New York, N. Y.	'20
Graybeal, Edward V., Min. Engr., Miami Copper Co.....	Box 100, Miami, Ariz.	'17
*Graybill, John H., Elect. Engr., Industrial Engrg. Dept., Westinghouse Electric & Mfg. Co.,	East Pittsburgh, Pa.	'12
Grayson, S. A., Pres., Jessop Steel Co.....	Washington, Pa.	'20
Green, Arthur C., Mgr., Central District Sales, Goodman Mfg. Co.,	4834 South Halsted St., Chicago, Ill.	'21
Green, Fred. W., V.P. & Dir., St. Louis Southwestern Ry. Co.,	1107 Buder Bldg., St. Louis, Mo.	'24
*Green, George L. ....	Box 2458, Stanford University, Cal.	'18
*Green, Harry, Traffic Mgr., Metal Traders, Inc.....	.67 Wall St., New York, N. Y.	'26
Green, Henry Martin, Gen'l Supt., Smelt. & Refin., U. S. Metals Refin. Co....	Carteret, N. J.	'20
Green, Waldron A., Supt., Hudson Bay Min. & Smelt. Co., Ltd., Flin Flon Mine,	Via The Pas, Man., Canada.	'18
Greenall, John, Engr.....	1503 Hamilton St., Allentown, Pa.	'09
Greenan, James O., Gen'l Supt., Consolidated Cortez Silver Mines Co.....	Cortez, Nev.	'23
Greenawalt, John E., Met. & Electro-Chem. ....	110 East 42nd St., New York, N. Y.	'24
Greenawalt, William E., Electro-Met.....	.85 South Sherman St., Denver, Colo.	'24
Greene, Herbert T. ....	Room 2009, 150 Nassau St., New York, N. Y.	'23
Greenfield, Samuel Joseph, Engr. & Geol., Mexican Corp.....	Fresnillo, Zac., Mexico.	'28
Greenidge, S. M., Research Engr., Texas Pacific Coal & Oil Co.....	Thurber, Tex.	'08
Greenland, C. W., Geol., N. A. Timmins, Inc.....	Box 1242, Timmins, Ont., Canada.	'23
Greenlee, William B., Pres., Greenlee Foundry Co.....	.662 West Roosevelt Rd., Chicago, Ill.	'20
Greenough, Leo, Pres. & Gen'l Mgr., Snow Storm Silver Lead Co.,	922 Old National Bank Bldg., Spokane, Wash.	'14
Greenough, W. Earl, Min. Engr., Atlas Mine.....	Mullan, Idaho.	'12
Greensfelder, Nelson Sutro, Advertising Mgr., Hercules Powder Co.,	Delaware Trust Bldg., Wilmington, Del.	'22
Greer, H. C., Min. Engr., Pres., Preston County Coke Co....	Box 870, Morgantown, W. Va.	'08
Gregg, James L., Battelle Memorial Institute.....	.505 King Ave., Columbus, Ohio.	'23
Gregg, Wells Kellogg, Met., Superior Charcoal Iron Co.,	904 Michigan Trust Bldg., Grand Rapids, Mich.	'18
Gregory, E. H. ....	Apt. 157, Guadalajara, Jal., Mexico.	'16
Gregory, Frank C., Safety Engr., U. S. Employees' Compensation Commission,	Washington, D. C.	'24
*Gregory, J. N. ....	Box 375, Fort Stockton, Tex.	'22
*Gregory, Peter Paul, Pet. Engrg. Dept., Humble Oil & Refin. Co.....	McCamey, Tex.	'29
*Gregory, Sewell Harding, Morgan Crucible Co., Ltd., Battersea Wks.,	Church Rd., London, S.W.11, England.	'18
Greig, E. H., Asst. Mine Supt., Burmah Mines, Ltd....	Namtu, N.S.S., Upper Burma, India.	'19
Greiner, Earl S., Research Fellow, Dept. of Met. Engrg., Lehigh Univ....	Bethlehem, Pa.	'28
Grenell, Leland H., Met. Engr., Engrg. Dept., Frigidaire Corp.....	Dayton, Ohio.	'24
Greninger, Alden B., Graduate Student, Stanford Univ....	Box 860, Stanford University, Cal.	'28
Greninger, Ira L., Mine Supt., Andes Copper Min. Co.....	Potrillo, Chinaral, Chile.	'17
Gretsum, Irving G., Engr. for Ralph E. Davis....	1710 Union Bank Bldg., Pittsburgh, Pa.	'27
Gretzinger, William, Editor, <i>Oil Field Engrg.</i> ....	Chestnut & 56th Sts., Philadelphia, Pa.	'20
Greve, L. W., Treas., Cleveland Pneumatic Tool Co., 3734 East 78th St.,	Cleveland, Ohio.	'23
Gribben, Dwight H., Student, Univ. of California.....	Berkeley, Cal.	'27
Grier, C. D., American Cyanamid Co.....	Box 619, Johannesburg, Transvaal, S. Africa.	'15
Griessmann, F. A., Dir., Fried. Krupp Grusonwerk A. G....	Marzberg-Buckau, Germany.	'26
Griffen, John, Sales Engr., American Rheolaveur Corp.,	Coal Exchange Bldg., Wilkes-Barre, Pa.	'19
*Griffen, John D. M., Asst. Engr., Westchester County Park Commission,	Altoona Dr., Mt. Vernon, N. Y.	'25
Griffin, Frank W., Cons. Min. Engr.....	Holbrook Bldg., 58 Sutter St., San Francisco, Cal.	'02
Griffin, H. M., Mining.....	c/o Noel Griffin, Box 592, Bulawayo, Rhodesia, S. Africa.	'04
Griffin, Martin Luther, Chem. Engr.....	.4 Prospect Pl., Taunton, Mass.	'89
Griffs, R. O., Met., The American Rolling Mill Co.....	Ashland, Ky.	'20
Griffith, Edward, Gen'l Mgr., Lehigh & Wilkes-Barre Coal Co.,	16 So. River St., Wilkes-Barre, Pa.	'22
Griffith, Glenn R. V., Pet. Engr., Pet. Reclamation Co....	82 Mechanic St., Bradford, Pa.	'27
Griffith, William V., Jr.....	Instructed to hold everything.	'08
Griffiths, G. F., Gen'l Mgr., Bacis Gold & Silver Min. Co., Ltd.,	Bacis, via Estacion Otinapa, Dgo., Mexico.	'27
Griffiths, William, Met. Acct., Braden Copper Co.....	Sewell, Rancagua, Chile.	'19



# 60 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Griffiths, William Ewart, Hunt Award A.I.M.E. '29.	Met. Engr., Central Alloy Steel Corp., Massillon, Ohio.	'29
Griggs, C. C., Min. Engr., Bureau of Internal Revenue, Treasury Dept., Washington, D. C.		'14
†Grimes, Howard A., Geophysical Exploration, West India Oil Co., Port of Spain, Trinidad, B. W. I.		'29
Grimes, John Alden, Engr. in Charge Depreciation Investigations, Treasury Dept., Income Tax Unit, Bureau of Internal Revenue, Washington, D. C.		'13
Grimes, R. A., Western Exploration Co.	Silverton, B. C., Canada.	'20
Grimm, George A., Geol., Twin State Oil Co.	Box 1501, Tulsa, Okla.	'23
**Grimshaw, Leonard C., Asst. Met., Ludlum Steel Co.	Watervliet, N. Y.	'29
Grine, Harry Adam, Chase & Waring.	17 E. 42nd St., New York, N. Y.	'19
Grinsfelder, Sam, Asst. to Rocky Mountain Mgr. in charge of Texas, Union Oil Co. of California, 823 Mims Bldg., Abilene, Tex.		'28
†Grisham, Charles A., Asst. Treas., St. Louis Smelt. & Ref. Co., 722 Chestnut St., St. Louis, Mo.		'17
Grishkevich, Vitaly I., Student, School of Mines, Univ. of California.	Berkeley, Cal.	'20
Grissom, Roy J., Asst. Supt. of Mines, Chino Mines, Nevada Cons. Copper Co., Santa Rita, N. M.		'22
Griswold, C. T.	1500 Los Lomas Rd., Albuquerque, N. M.	'07
Griswold, Edward H., Pet. Engrg. Dept., The Marland Oil Co.	Ponca City, Okla.	'25
Griswold, George Gary, Jr., Min. Engr., Research Engr., Timber Butte Mill Co.	Butte, Mont.	'17
Griswold, Harry Lane.	Suite 516 17, First National Bank Bldg., Fort Worth, Tex.	'23
Grodsky, Vladimir A., Research Assoc., Bureau of Standards.	Washington, D. C.	'19
Groesbeck, Edward C., Assoc. Scientist, Div. of Met., U. S. Bureau of Standards, Washington, D. C.		'19
Grogan, Kenneth C., Student, University of Toronto.	Toronto, Ont., Canada.	'29
Grondijs, H. F., Prof., Technische Hoogeschool.	Delft, Netherlands.	'08
Gronemeyer, Herman A., Supt., Zinc Smelter, Grasselli Chem. Co.	Meadowbrook, W. Va.	'28
Gronningsater, Anton, Met. Engr., Falconbridge Nickel Mines, Ltd.	Sudbury, Ont., Canada.	'17
Groos, Henry, Min. & Cons. Engr.	Harlan, Ky.	'16
Grosberg, Alexander, Cons. Engr., Stifel, Nicolaus & Co.	314 N. Broadway, St. Louis, Mo.	'14
Gross, Henry Emmett, Engrg. Dept., Pacific Western Oil Co., Petroleum Securities Bldg., Los Angeles, Cal.		'28
Gross, John, Met., U. S. Bureau of Mines, Univ. of Utah.	Salt Lake City, Utah.	'96
Gross, Le Roy M., Min. Engr.	39 Broadway, New York, N. Y.	'23
Grossmann, Marcus A., Chief Met. Engr., Central Alloy Steel Corp.	Canton, Ohio.	'20
†Grothe, John D., Tech. Dir., Societe Dorr & Cie.	26 Rue de la Pepiniere, Paris, France.	'23
Grout, Frank F., Assoc. Prof., Geol. & Mineralogy, Univ. of Minnesota.	Minneapolis, Minn.	'18
†Grove, Clark, Executive V.P. & Treas., The Mine & Smelter Supply Co.	Denver, Colo.	'25
Grove, Joseph R., Field Supt., The Burmah Oil Co. Ltd.	Yenangyat, Upper Burma, India.	'25
Grow, Julian E., Gen'l Foreman, Raritan Copper Wks.	Perth Amboy, N. J.	'27
Gruber, R. E., Portuguese American Tin Co.	Belmonte, Portugal.	'20
Grubnau, V. Carl, Met., V.P. & Treas., Grubnau Chemical Co.	Waldo, N. M.	'14
†Grumbine, Roy William, Asst. Engr., Valuation Dept., Southern Pacific Co., Room 1035, 65 Market St., San Francisco, Cal.		'21
Grunert, August, Min. Engr.	Box 266, Butte, Mont.	'29
Grunow, William Ranald.	1240 South Ave., Rochester, N. Y.	'15
Gruver, E. L., Ward, Gruver & Co.	20 Broad St., New York, N. Y.	'17
Gruver, Irving A., Min. Geol., Anaconda Copper Min. Co.	526 Hennessy Bldg., Butte, Mont.	'26
Gucker, F. T., Sec.-Treas. & Gen'l Mgr., The John T. Dyer Quarry Co., 216 Harrison Bldg., Philadelphia, Pa.		'24
Guernsey, F. W., Min. & Met. Engr.	736 Granville St., Vancouver, B. C., Canada.	'04
Guernsey, John B., Reorganization Engr., Union League Club.	San Francisco, Cal.	'16
†Guernsey, Tarrant D., Anglo-American Corp. of South Africa, Ltd., Broken Hill, N. Rhodesia, Africa.		'28
Guerrero, Luis F., Min. Engr.	Cucuta, Colombia.	'28
Guess, George A., Prof. of Met., University of Toronto.	Toronto, Ont., Canada.	'05
Guess, H. A., Mngng. Dir., Min. Dept., American Smelt. & Ref. Co., 120 Broadway, New York, N. Y.		'07
Guffanti, Albert, Engr.	Palisades Park, N. J.	'20
Guggenheim, Daniel, American Smelt. & Ref. Co.	120 Broadway, New York, N. Y.	'15
Guggenheim, Edmond A., Min. & Met.	120 Broadway, New York, N. Y.	'15
Guggenheim, Harry Frank, Merchant, Guggenheim Bros.	120 Broadway, New York, N. Y.	'14
Guggenheim, S. R., Member firm of Guggenheim Bros.	120 Broadway, New York, N. Y.	'23
Guggenheim, Simon, Pres., American Smelt. & Ref. Co.	120 Broadway, New York, N. Y.	'15
Guhlman, Charles Frederick, Chem. Engr., The Grasselli Chemical Co., Guardian Bldg., Cleveland, Ohio.		'21
Guiberson, S. A., Jr., Oil Operator.	1304 Security Title Insurance Bldg., Los Angeles, Cal.	'18
†Guilford, Edward H., Gen'l Mgr., The Radiore Co. of Canada, Ltd., 426 Transportation Bldg., Montreal, Que., Canada.		'28
Guisse, M. H.	Box 134, Zellwood, Fla.	'27

For explanation of symbols, see page 5.

Guiteras, Joseph Ramon, Prof. of Min. Engrg., Univ. of Wyoming.....	Laramie, Wyo.	'21
Guterman, Kenneth Sproat, Pres., Henry Gardner, Guterman & Co., Inc., Room 2905, 120 Broadway, New York, N. Y.		'15
Gulick, H. S., Met. Engr., Supt., Brass Fdrys., The New York Air Brake Co., Watertown, N. Y.		'16
Gulley, M. Gordon, Geol., Eastern Gulf Oil Co....	Box 1214, c/o K. C. Heald, Pittsburgh, Pa.	'28
Gummere, William, Chem.....	Roebbling, N. J.	'08
Gunther, C. Godfrey, Messrs. Brown Shipley & Co.....	123 Pall Mall, London, England.	'06
Gurley, Leon R., Carl H. Pforzheimer & Co.....	25 Broad St., New York, N. Y.	'26
Gurney, Erb, Student, Min. Engrg., Oregon School of Mines.....	Corvallis, Ore.	'27
Gutzwiller, Otto, Cons. Geol.....	Bremgarten, Aargau, Switzerland.	'28
Guy, Thomas W., Gen'l Supt., Boone County Coal Corp.....	Sharples, W. Va.	'26
Guyer, Raymond, Cons. Engr., Mngng. Dir., Mexican Premier Mines Co., Mazatlan, Sin., Mexico.		'16
Gwinn, J. W., Min. Engr., Bunker Hill & Sullivan Min. & Concentrating Co., Bernard, via Cascade, Idaho.		'12
Gwyer, Alfred G. C., Chief Met., the British Aluminum Co., Ltd., Bank Quay, Warrington, Lancs., England.		'28
†Gyss, Emile E., Min. Engr., Goodman Mfg. Co.....	4834 S. Halsted St., Chicago, Ill.	'22
Haapanen, Henry Waldemar, Construction Supt., Consolidation Coal Co....	Fairmont, W. Va.	'23
Haas, Frank, Min. Engr., Haas & McCullough.....	1601 Chestnut St., Philadelphia, Pa.	'97
Haas, Herbert.....	1049 Walker Ave., Oakland, Cal.	'02
Haase, Conrad C., Sales Engr., Ingersoll-Rand Co.....	Huntington, W. Va.	'26
Haasis, Dunbar F.....	Island Home Park, Knoxville, Tenn.	'86
Habertier, Joseph J., Special Engr., Glen Alden Coal Co.....	Scranton, Pa.	'22
Hachita, M. Shozo, Chem., Lehigh Valley Coal Co.....	Wilkes-Barre, Pa.	'15
†Hack, Clement A., Patent & Trade Marks Att'y., Collins House, 360 Collins St., Melbourne, Vic., Australia.		'27
Hackett, Cortez P., Engr., The Solvay Process Co.....	Syracuse, N. Y.	'29
Hackwood, Arthur W., Mill Supt., Kennecott Copper Co.....	Latouche, Alaska.	'13
Haddock, John C., Pres. & Gen'l Mgr., Haddock Min. Co. & Candelmas Collieries Co., Miners Bank Bldg., Wilkes-Barre, Pa.		'23
Haddow, Hugh J., V.P. & Treas., Menantico Sand & Gravel Co.....	Millville, N. J.	'27
Hadesty, George B., Gen'l Supt., Philadelphia & Reading Coal & Iron Co....	Pottsville, Pa.	'14
HADFIELD, ROBERT A., SIR, John Fritz Medallist, 1921; Steel Mfr., Hadfields, Ltd., 22 Carlton House Terrace, London, S.W.1, England.		'06
Hadley, Egbert C., Ballistic Engr., Remington Arms Co., Inc.....	Bridgeport, Conn.	'28
Hadley, Walter E., Asst. Gen'l Supt., Illinois Steel Co.....	Gary, Ind.	'19
Haehl, H. L., Cons. Hydraulic Engr.....	1314-17 Humboldt Bank Bldg., San Francisco, Cal.	'03
†Haeseler, Albert E., Shift Boss, Electrolytic Cell Room, Sullivan Zinc Plant, Sullivan Min. Co., Kellogg, Idaho.		'29
†Haffenreffer, Rudolf F., 3rd, Asst. Treas., Utah-Apex Min. Co....	Bingham Canyon, Utah.	'27
Haffner, J. B., Gen'l Mgr., Consolidated Coppermines Corp.....	Kimberly, Nev.	'24
Hagenbuch, Charles C., Min. Engr., Consolidation Coal Co.....	Fairmont, W. Va.	'29
Hager, Dilworth S., Oil Geol.....	1637 Milam Bldg., San Antonio, Tex.	'23
Hager, Dorsey.....	c/o D. S. Hager, Milam Bldg., San Antonio, Tex.	'16
†Hager, John William, Hammond Iron Co.....	Box 831, Birmingham, Ala.	'25
Hager, Lee, Geol., Pres., The Federal Royalty Co.....	1521 Esperson Bldg., Houston, Tex.	'04
†Haggenjos, John, V.P., Eureka Brass Co.....	601 Red Bud Ave., St. Louis, Mo.	'18
†Hagy, James A., Min. Engr., Chesapeake & Ohio Railway Fuel Mines.....	Dorothy, W. Va.	'24
Hahn, Albert W., Cons. Met.....	605 Dooly Block, Salt Lake City, Utah.	'17
†Hahn, Emilie.....	Address Wanted.	'26
†Hahn, J. H., Shift Boss, Gravel Plant, Pearl City Gravel Co.....	201 E. 5th, Muscatine, Iowa.	'28
†Haigh, Berte R., Adjunct Professor, Dept. of Geol., College of Mines, University of Texas, El Paso, Tex.		'21
Haight, Clarence M., Min. Engr., New Jersey Zinc Co.....	Franklin, N. J.	'13
Haines, Charles James, V.P., Keith Dunham Co.....	110 So. Dearborn St., Chicago, Ill.	'29
Haines, Claude V., The Royal Automobile Club.....	London, S. W. 4, England.	'21
Haines, P. A., Gen'l Supt., St. Joseph Lead Co.....	Rivermines, Mo.	'16
Hake, Benjamin F., Pet. Geol., Hudson's Bay Marland Oil Co., 410 McLeod Bldg., Edmonton, Alta., Canada.		'20
Haldeman, G. T., Cons. Min. Engr.....	351-59 W. 42nd St., New York, N. Y.	'28
Hale, Herbert C., Cont. Engr., Elliott Co.....	1514 Lexington Bldg., Baltimore, Md.	'07
†Hale, Paul Harmon, Santa Cruz Min. Co.....	Santiago Papasquiaro, Dgo., Mexico.	'24
†Hale, Richard W., Lawyer, Hale & Dorr.....	60 State St., Boston, Mass.	'24
†Hales, Harold H., Sherritt Gordon Mines.....	The Pas, Man., Canada.	'20
†Haley, Alva J., Chief Geol., Patino Mines & Enterprises Cons.....	Llallagua, Bolivia.	'25
Haley, Dennis F.....	Box 484, Joplin, Mo.	'17
Hall, Albert E.....	39 Linden Ave., Metuchen, N. J.	'24

# 62 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Hall, Benjamin M., Cons. Engr.....	701-702 Peters Bldg., Atlanta, Ga.	'95
Hall, C. J., Met., Asst. Supt. of Smelter, American Smelt. & Refin. Co., Apt. 101, Monterey, N. L., Mexico.		'15
Hall, C. W., Min. Engr., V.P. & Mgr. of Prod., United Clay Mines Corp., Prospect and Oakland Sts., Trenton, N. J.		'17
Hall, Clarence A., Electric Storage Battery Co., 19th St. & Allegheny Ave., Philadelphia, Pa.		'19
Hall, Charles Gilbert, Gen'l Mgr., Walter Bledsoe & Co., 708 Terre Haute Trust Bldg., Terre Haute, Ind.		'27
Hall, Ellis A., Pres., Condor Pet. Co.....	Box 211, Abilene, Tex.	'21
Hall, Elwin B.....	640 Title Insurance Bldg., Los Angeles, Cal.	'11
Hall, Everett J., Prof. of Assaying, Columbia Univ.....	New York, N. Y.	'02
†Hall, George H., Sec. & Sales Mgr., The Cleveland Rock Drill Co., 8734 E. 78th St., Cleveland, Ohio.		'23
Hall, George Martin, Assoc. Prof. of Geol., Univ. of Tennessee, & Asst. Geol., U. S. Geol. Survey, Knoxville, Tenn.		'22
Hall, James H., Mgr., The Texas Co. of Mexico, S. A....	Apt. 191, Tampico, Tamps., Mexico.	'26
Hall, John H., Howe Memorial Lecturer, 1929; Met. Engr., Taylor-Wharton Iron & Steel Co., High Bridge, N. J.		'11
†Hall, John Hudson, Jr., Director, United Verde Copper Co., 111 Broadway, New York, N. Y.		'20
Hall, Oliver, Gen'l Mgr., Mond Nickel Co.....	Coniston, Ont., Canada.	'15
Hall, R. G., Cons. Engr.....	795 Sutter St., San Francisco, Cal.	'14
†Hall, Raymond R., Interstate Mines, Inc.....	Granite, Ore.	'21
Hall, Robert Dawson, Engr., Editor, <i>Coal Age</i> .....	10th Ave. & 36th St., New York, N. Y.	'13
Hall, William J., Coeur d'Alene Hardware & Foundry Co.....	Wallace, Idaho.	'12
Haller, Frank H., Calumet & Hecla Cons. Copper Co.....	Calumet, Houghton Co., Mich.	'19
Hallett, Alfred Franklin, Chief Chem., Leaching Plant, Inspiration Copper Co., Box 18, Inspiration, Ariz.		'23
Hallett, Robert L., Chemist, National Lead Co.....	105 York St., Brooklyn, N. Y.	'16
Hallett, William J.....	1337 7th St., Santa Monica, Cal.	'14
Halley, Albert Smith, Min. Engr.....	Rapid City, S. D.	'05
Halloran, Will, Supt., Old Colony Mines, Ltd.....	Bin 3, Kingman, Ariz.	'14
Hallows, Raymond L., Met., Eagle-Picher Lead Co.....	Joplin, Mo.	'27
Halvorsen, Arthur L., Cons. Chem. Engr., Travis Research Co., 119 Broad St., New York, N. Y.		'24
Hamer, Paul O. ....	Address Wanted.	'24
Hamernik, Frank J., Met. Engr., Federated Metals Corp., 41st & Wallace Sts., Chicago, Ill.		'28
Hamfeldt, George K. ....	Oxelosund, Sweden.	'05
Hamilton, Alexander K., Pres., M. H. Treadwell Co. of Ill., 208 South La Salle St., Chicago, Ill.		'14
Hamilton, Arthur L., Min. Engr., Pres., International Tag Co., 319-329 North Whipple St., Chicago, Ill.		'03
Hamilton, Charles W., Asst. to V.P., Venezuela Gulf Oil Co. & South America Gulf Oil Co., 21 State St., New York, N. Y.		'14
Hamilton, E. A., Mgr. of Mines, United States Smelt. Refin. & Min. Co., 912 Newhouse Bldg., Salt Lake City, Utah.		'27
Hamilton, E. H., Met., United States Smelt. Refin. & Min. Co.....	Midvale, Utah.	'11
Hamilton, E. M., Met. Engr., Hamilton, Beauchamp & Woodworth, 564 Market St., San Francisco, Cal.		'25
Hamilton, Edward Parmelee, V.P. & Treas., John Wiley & Sons, Inc., 440 Fourth Ave., New York, N. Y.		'26
Hamilton, Frank C. ....	2722 Sacramento St., El Paso, Tex.	'93
Hamilton, Frank E., Allied Chem. & Dye Corp.....	61 Broadway, New York, N. Y.	'24
Hamilton, H. T., New York Trust Co.....	100 Broadway, New York, N. Y.	'13
Hamilton, J. W. H., Min. Engr., Exporter, J. W. H. Hamilton, Inc., 82 Broadway, New York, N. Y.		'12
Hamilton, James A., Mgr., Morning Glory Min. & Smelt. Co.....	Patagonia, Ariz.	'29
Hamilton, L. A. ....	440 Park Ave., New York, N. Y.	'14
Hamilton, Orr R., Min. Engr., Oliver Iron Min. Co.....	Wolvin Bldg., Duluth, Minn.	'17
Hamilton, P. D. P., General Engrg. Co.....	159 Pierpont St., Salt Lake City, Utah.	'28
†Hamilton, R. M. P. ....	350 Bay St., Toronto, Ont., Canada.	'27
Hamilton, Richard.....	23 Leake St., Cottesloe, Western Australia.	'98
Hamilton, Robert, Cons. Engr., Min. Dept., Tenn. Coal, Iron & R. R. Co., Birmingham, Ala.		'15
Hamilton, S. Harbert, Min. Geol. & Engr.....	2050 North 63rd St., Philadelphia, Pa.	'05
Hamilton, Thomas M., Cons. Min. Engr.....	724 I. N. Van Nuys Bldg., Los Angeles, Cal.	'02
Hamilton, W. C., Research Dir., American Steel Foundries, Indiana Harbor, East Chicago, Ind.		'25
Hamilton, Walter R., Pet. & Min. Engr.....	Box 1466, Tulsa, Okla.	'04
Hamilton, William J., Met.....	97 Boulevard, Westmount, Que., Canada.	'05
Hammer, Alfred E., Pres., Treas. & Gen'l Mgr., Malleable Iron Fittings Co., Branford, Conn.		'12
†Hammer, Bernard E., Anglo Chilean Nitrate Co.....	Tocopilla, Chile.	'21
Hammer, William L., Civ. & Min. Engr.....	Corpus Christi, Tex.	'05

For explanation of symbols, see page 5.



†Hammersmith, F. Arthur, Sec.-Treas., Treadwell Yukon Co., Ltd., 920 Crocker Bldg., San Francisco, Cal.	'28
Hammill, Chester A., Cons. Geol. .... 1417 American Exchange Bank Bldg., Dallas, Tex.	'17
Hammon, Wendell P., Hammon Engrg. Co., Balfour Bldg., 351 California St., San Francisco, Cal.	'01
Hammond, A. Horton, Cons. Min. Engr. .... Arizpe, Son., Mexico.	'24
Hammond, Frank G., Jr., Min. Geol. .... 730 Jefferson Ave., Scranton, Pa.	'27
HAMMOND, JOHN HAYS, William Laurence Saunders, Metallist, A.I.M.E., 1929, Min. Engr., 120 Broadway, New York, N. Y.	'81
Hamner, Jordan A., Student, Oregon State College. .... Corvallis, Ore.	'29
Hampson, Burton Daniel, Gen'l Mgr., Punxsutawney Drill & Contracting Co., Inc., Punxsutawney, Pa.	'27
Hampton, F. H. Franklin, Mngng. Dir., Robins Conveyors, Ltd., S. A., Box 4736, Johannesburg, Transvaal, S. Africa.	'16
Hampton, Lawrence C., Dir., Atlantic Union Oil Co., 66 Pitt St., Sydney, N. S. W., Australia.	'21
Hanburger, Fred W., Cons. Engr., Special Lecturer, College of City of New York, 139th St. & Convent Ave., New York, N. Y.	'23
Hance, James H., Dean, School of Mines, Oregon State College. .... Corvallis, Ore.	'09
Hanchett, L., Pres., Utah Power & Light Co. .... 408 Newhouse Bldg., Salt Lake City, Utah.	'00
Hancock, E. T., Geol., Romano-Americana. .... Ploesti, Romania.	'20
Hancock, H. Lipson, 46 Bundarra Rd., Bellevue Hill, Woollahra, Sydney, N. S. W., Australia.	'99
Hancock, Harry D., Gas Engr., Henry L. Doherty & Co. .... 60 Wall St., New York, N. Y.	'29
Hancock, Ray A. .... R.D. 3, Box 37, Fullerton, Cal.	'28
Handley, Robert W., Engr., Chief of Service Research, Union Miniere du Haut Katanga, Panda, Belgian Congo, via Capetown, Africa.	'17
†Handwerk, Erwin C., Development Engr., N. J. Zinc Co. .... Palmerton, Pa.	'22
Handy, H. H. S., Chem. Mfr. .... 128 Dewitt St., Syracuse, N. Y.	'06
Handy, James Otis, Dir. of Chem. & Met. Investigations, Pittsburgh Testing Lab., 72 Washington St., New York, N. Y.	'22
Handy, R. S., Mill Supt., Bunker Hill & Sullivan M. & C. Co. .... Kellogg, Idaho.	'16
Hanks, Abbot A., Chem., Assayer, Met. .... 624 Sacramento St., San Francisco, Cal.	'97
Hanks, G. Raymond, Mfg. Plant Supt., Alloy Steel Castings, Taylor-Wharton Iron & Steel Co., High Bridge, N. J.	'24
Hanley, Herbert R., Min. & Met. Engr., Assoc. Prof. of Met., Missouri School of Mines, Rolla, Mo.	'01
Hanley, Walter F., Min. Engr. .... 31 West 124th St., New York, N. Y.	'20
Hanna, Howard M., Pres., M. A. Hanna & Co. .... Cleveland, Ohio.	'13
Hansen, C. A., Met., General Electric Co. .... Schenectady, N. Y.	'16
Hansen, George P., General Supt. of Operations, Ashland Div., American Rolling Mill Co., Ashland, Ky.	'22
Hansen, George T., Min. Engr., Pres., Utah Southern Oil Co., 533 Cliff Bldg., Salt Lake City, Utah.	'08
Hansen, Harald, Chief of Norwegian Ordnance Inspection, Kanonkontrollen, Oslo, Norway.	'20
Hansen, M. V. .... North Lily Mine, Eureka, Utah.	'25
Hanson, Earl F., Geol. & Engr., Tintic Standard Min. Co. .... Dividend, Utah.	'25
Hanson, Ernest A., Pet. Engr., U. S. Geol. Survey. .... Box 591, Roswell, N. M.	'28
Hanson, Henry, Min. & Met. Engr. .... 24 King St. W., Toronto, Ont., Canada.	'16
Hanson, Henry Bernard, Mgr., San Nicolas Min. & Milling Co., S. A., Vicente Guerrero, Dgo., Mexico.	'28
Hanson, Wilbur W., Valuation Engr., U. S. Treasury Dept., 1010 Boston Bldg., Salt Lake City, Utah.	'23
Hanst, John Faber, Acting Mgr., Pittsburgh Branch, Ingersoll-Rand Co., 706 Chamber of Commerce Bldg., Pittsburgh, Pa.	'18
Harbaugh, M. D., Sec., Tri-State Zinc & Lead Ore Producers Association, Box 95, Miami, Okla.	'29
HARBORD, F. W., Cons. Met., Senior Partner, Riley Harbord & Law, 16 Victoria St., London, S. W., England.	'21
Harbrecht, William Louis, Met. Research, Electro Metallurgical Co., Niagara Falls, N. Y.	'21
Harcus, Robert, Field Supt., The Burmah Oil Co., Ltd., Singu Oilfield, Chauk, Burma, India.	'26
Hard, H. W., Student, Montana State School of Mines. .... Butte, Mont.	'29
Hardenbergh, William P. .... 47 West 34th St., New York, N. Y.	'94
Harder, E. C., Min. Geol. .... 1111 Harrison Bldg., Philadelphia, Pa.	'10
Harder, Oscar E., Prof. of Metallography, Minnesota School of Mines, Univ. of Minnesota, Minneapolis, Minn.	'18
Hardgrove, R. M., Research Engr., Fuller Lehigh Co. .... Fullerton, Pa.	'27
Hardie, A. B. .... 21 Church St., Ardmore, Pa.	'16
Harding, George, Mgr., Spokane Oxy-Acetylene Co. & The Paulsen Realty Co., 1104 Paulsen Bldg., Spokane, Wash.	'26

Harding, James E., Cons. Min. Engr., c/o G. H. Watson & Co., 149 Broadway, New York, N. Y.	'20
Harding, P. O., Chief Draftsman, The Pyrites Co., Wilmington, Del.	'16
Hardinge, H. W., Min. Engr., Hardinge Co., Inc., 122 East 42nd St., New York, N. Y.	'02
Hardinge, Harlowe, Mech. Engr., V.P. & Gen'l Mgr., Hardinge Co., Inc., New York, Pa.	'17
†Hardinger, Sanford C., Asst. Supt., Syndicate Min. Co., Rio Guinobatan, Masbate, P. I.	'21
Hardison, Allen C., Civ. & Min. Engr., Santa Paula, Cal.	'99
†Hardy, Charles, Pres., Charles Hardy, Inc., 100 East 42nd St., New York, N. Y.	'26
Hardy, Eugene A., Engrg. Land appraisement, Field Agent, Southern Pacific Co., San Francisco, Cal.	'23
Hardy, J. Gordon, Room 2725, 230 Park Ave., New York, N. Y.	'94
Hardy, James W., Min. Engrg. Dept., Goodman Mfg. Co., 48th Pl. & Halsted St., Chicago, Ill.	'22
Hardy, R. A., 401 South Virginia St., Reno, Nev.	'16
Hardy, Thomas W., Met. Engr., Division of Ore Dressing & Met., Mines Branch, Dept. of Mines, Ottawa, Ont., Canada.	'16
†Hardy, William C., Sec., William A. Hardy & Sons Co., Fitchburg, Mass.	'18
†Hardy, Willis W., Geophysical Section, Creole Pet. Corp., Apt. 85, Maracaibo, Venezuela.	'29
Harkes, William, Gen'l Supt., Central Coal & Coke Co., Keith & Perry Bldg., Kansas City, Mo.	'26
Harley, G. Townsend, Min. Engr. & Geol., Box 537, Socorro, N. M.	'29
†Harloff, Carleton S., Asst. Met., Nichols Copper Co., Laurel Hill, L. I., N. Y.	'25
†Harlton, Bruce H., Geol. & Engr., Amerada Pet. Co., Box 2022, Tulsa, Okla.	'24
Harman, Everette McD., Pres., Puritan Coal Corp., Puritan Mines, W. Va.	'27
Harmon, Benjamin G., Met., Dist. Mgr., Mahr Manufacturing Co., Tower Bldg., 6 North Michigan Ave., Chicago, Ill.	'19
Harmon, John Paul, Mine Engr., South American Dev. Co., Apt. 655, Guayaquil, Ecuador.	'28
Harner, Loyall S., Met. Engr., Supt., Mill Dept., Golden Cycle Min. & Reduction Co., Colorado Springs, Colo.	'16
Harnsberger, T. K., Geol., Div. Geol., Roxana Pet. Corp., Tulsa, Okla.	'19
Harper, Arthur Finley, Min. Engr., Supt., Coal Mines, Sloss-Sheffield Steel & Iron Co., Lewisburg, Ala.	'20
Harper, John B., Min. Engr., Gen'l Mgr., The Republican Min. & Metal Co., Ltd., Wadley, S. L. P., Mexico.	'14
Harper, T. E., Jr., Research Chem., Cerro de Pasco Copper Corp., Oroya, Peru.	'26
Harrington, Charles L., Min. Engr., U. S. Mineral Surveyor, 1422 Colorado St., Idaho Springs, Colo.	'20
Harrington, Daniel, Chief Engr., Safety Div., Bureau of Mines, Winder Bldg., Washington, D. C.	'15
Harrington, George B., Pres., Chicago, Wilmington & Franklin Coal Co., 407 McCormick Bldg., Chicago, Ill.	'18
Harrington, George L., Geol., Standard Oil Co. of Argentina, General Ballivian, Km. 1352, F. C. C. N. A., P'cia de Salta, Argentina.	'20
Harrington, L. C., Prof., Min. & Met., University of North Dakota, University Station, Grand Forks, N. D.	'22
Harrington, R. F., Chem. & Met., Hunt-Spiller Mfg. Corp., 383 Dorchester Ave., Boston, Mass.	'17
Harris, Arnold W., Min. Engr., Wiluna Gold Mines, Ltd., Wiluna, Western Aust., Australia.	'20
Harris, Arthur Lines, Pres., LaJoya Gravel Co., Box 924, San Benito, Tex.	'11
Harris, Frank W., Met. (Research), Evans-Walloway Zinc Co., Monsanto P. O., East St. Louis, Ill.	'24
Harris, G. H. Ronald, Min. Engr., 481 Ridout St., London, Ont., Canada.	'15
Harris, Henry, Dir., Messrs. H. J. Enthoven & Sons, Ltd., 62 New Broad St., London, E.C.2, England.	'05
Harris, James E., Met., Bell Telephone Labs., Inc., 463 West St., New York, N. Y.	'27
Harris, Kenneth V. N., Underground Engr., American Metal Co. of New Mexico, Pecos Mines, Tererro, N. M.	'28
†Harris, Laurence V. D., Bldg. Contractor, V.P., Kuhn, Smith & Harris, Inc., 461 Eighth Ave., New York, N. Y.	'23
†Harris, Sidney, Buyer of Met. By-Products, 56 East Congress St., Chicago, Ill.	'20
Harris, Thomas D., Placer Mine Examinations, 322 Standard Oil Bldg., San Francisco, Cal.	'20
Harris, W. G., Supt., Wellington Mines, Ltd., Retallack, B. C., Canada.	'26
†Harris, William G., Pres., The Canada Metal Corp., 35 Fraser Ave., Toronto, Ont., Canada.	'18
†Harrison, Alan C., Mill Foreman, Burmah Corp., Ltd., Nanttu, F. S. S., Burma, India.	'28
Harrison, G. E., Cons. Min. Engr., 2021 Humbolt Ave. So., Minneapolis, Minn.	'05
Harrison, Perry G., Min. Engr., Mgr., Evergreen Min. Co., Ironton, Minn.	'15
Harrison, Thomas S., Pet. Geol., 705 First National Bank Bldg., Denver, Colo.	'10
Harrison, William H., Cons. Engr., National Press Bldg., Washington, D. C.	'20
Harrison, William H., Jr., Jr. Min. Engr., Anglo Chilean Cons. Nitrate Corp., Casilla 17, Tocopilla, Chile.	'27

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Harrod, Wayne A., Min. Engr.	1422 Courtland Ave., Los Angeles, Cal.	'16
Harrop, Harry S., Civ. & Min. Engr.	431 South Ave., Wilkensburg, Pa.	'08
Harroun, Douglass Houghton	1958 Marin Ave., Berkeley, Cal.	'18
Harsanyi, John	Boncar, Fayette Co., W. Va.	'28
†Harshberger, A. J., Pres. & Gen'l Mgr., Buckeye State Min. & Mill. Co.,	Box 153, Tucson, Ariz.	'24
Hart, Charles, Manufacturer, Pres., Wrought Iron Co. of America, 732 Commercial Trust Bldg., Philadelphia, Pa.; Pres., Delaware River Steel Co., Chester, Pa.		'24
Hart, Edward, Prof. of Chemistry, Lafayette College	Easton, Pa.	'81
Hart, James P., Min. Engr., Tonopah Extension Min. Co.	Tonopah, Nev.	'20
Hart, Verne A., Min. Engr., Mgr., Lake Almanor Inn Co.	Greenville, Cal.	'11
†Hart, William, Min. Engr.	Queenstown, Tasmania.	'21
Harter, Isaac, V.P., The Babcock & Wilcox Co.	85 Liberty St., New York, N. Y.	'14
†Hartley, John C.	Address Wanted.	'26
Hartman, Adolph E.	909 Milam Bldg., San Antonio, Tex.	'18
†Hartman, William, Supt., National Cash Register Co.	Dayton, Ohio.	'18
Hartmann, H. M., Gen'l Mgr., Ophir Hill Cons. Min. Co.	Ophir, Utah.	'26
†Hartshorne, Edward, Chem., American Smelt. & Refin. Co.,	Apt. 101, Monterrey, N. L., Mexico.	'28
†Hartwell, Moreland T., Geol., Transcontinental Oil Co.	Box 1520, Fort Worth, Tex.	'26
Hartwell, S. Warren, Chem., Vulcanite Portland Cement Co.	Easton, Pa.	'28
Harvey, A. S., Mine Operator	810 South Spring St., Los Angeles, Cal.	'17
†Harvey, Harry D., Pres. & Treas., The Monarch Engrg. & Mfg. Co.,	1206 American Bldg., Baltimore, Md.	'18
Harvey, Roger D., Petrographer & Geol., Cerro de Pasco Copper Corp.	Oroya, Peru.	'27
Harvey, Thomas C., Mine Supt., Columbia Steel Corp.	Columbia, Utah.	'27
†Harvey, Thomas G., Open Hearth, American Steel & Wire Co.,	767 Milbury St., Worcester, Mass.	'28
Harvie, Robert, Cons. Min. Geol.	355 Metcalfe Ave., Westmount, Que., Canada.	'20
Hasegawa, Kiohey, Min. Engr., Furukawa Mining Co.	Tokyo, Japan.	'07
Haselton, Charles F., Safety Engr., Pickands, Mather & Co.,	2000 Union Trust Bldg., Cleveland, Ohio.	'20
†Hasenoechl, Victor F., Industrial Engr., Ford, Bacon & Davis, Inc.,	39 Broadway, New York, N. Y.	'29
Haskell, Samuel, Mgr., Texas Pet. Co.	Bogota, Colombia.	'29
Haslam, Harry M., Investigator, Research Div., New Jersey Zinc Co.	Palmerton, Pa.	'26
Hasler, Harry H., Min. Engr., Chief Engr., Pennsylvania Coal & Coke Corp.,	Cresson, Cambria Co., Pa.	'20
Hasselbring, Albrecht	612 Queen St., Sault Ste. Marie, Ont., Canada.	'14
Hastings, Alfred T., The Dorr Co., Ltd.	16 South St., E. C. 2, London, England.	'17
Hastings, John B., Min. Engr.	8668 Cypress Ave., Southgate, Huntington Park, Cal.	'86
Hastings, John H., Chem.	Glorieta, N. M.	'15
Hastings, Warren, Mine Foreman, New Jersey Zinc Co.	Ogdensburg, N. J.	'14
Hatch, Hamlin Brooks, Min. Geol., Chief Geol., Reid Newfoundland Co., Ltd.,	St. Johns, Newfoundland.	'22
Hatchett, Samuel P.	4903 V St., N. W., Washington, D. C.	'14
Hatori, Takumatsu, Met. Engr., Mitsui Min. Co., Ltd.,	1 Surugacho, Nihonbashi-ku, Tokyo, Japan.	'22
Hatton, Frederic G., Pres., Hatton, Brown & Co., Inc.	150 E. Broad St., Columbus, Ohio.	'26
†Haug, Ethelbert, Haug & Kinsella Lease	Mullan, Idaho.	'19
Haultain, H. E. T., Min. Engr., Dept. of Min., University of Toronto, Toronto, Ont., Canada.		'98
Haury, P. S., Pet. Engr. & Geol., Simms Oil Co.	210 Mammoth Bldg., Shawnee, Okla.	'17
†Hausen, Charles Bradstreet, Utah-Delaware Min. Co.	Bingham Canyon, Utah.	'28
Havenor, H. E., Stock Broker, Havenor, Pett & Co.,	510 Newhouse Bldg., Salt Lake City, Utah.	'20
Haverfield, M. George, Pres., The Haverfield Materials Co.,	2230 West 5th Ave., Columbus, Ohio.	'24
Havlin, Thomas N.	Address Wanted.	'14
Hawdon, William, Cleveland Technical Institute	Corporation Rd., Middlesbrough, England.	'99
Hawker, Edward William, Met.	East Bungaree, Clare, S. Australia.	'92
Hawkins, Arthur L.	Box 1532, San Antonio, Tex.	'28
Hawkins, Glenn D., Geol., Standard Oil Co. of Venezuela.	Maturin, Venezuela.	'23
Hawkins, J. D., Met. Engr.	Box 163, Colorado Springs, Colo.	'93
Hawkins, T. G., Jr.	145 E. 49th St., New York, N. Y.	'17
Hawkrige, Leslie D., V.P., Hawkrige Bros. Co.	303 Congress St., Boston, Mass.	'19
†Hawks, Herbert D., Sales Mgr., Anaconda Copper Min. Co.,	111 West Washington St., Chicago, Ill.	'14
Hawley, Robert H., Min. Engr., Supt. of Concentration, Union Miniere du Haut Katanga, Likasi-Panda, Belgian Congo, W. Africa.		'13
†Hawn, Herbert Walker, Instructor at Michigan College of Mining & Technology,	Houghton, Mich.	'23



# 66 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Hawxhurst, Robert, Cons. Engr. & Geol., 613 Crocker First National Bank Bldg., San Francisco, Cal.	'05
Hay, Henry, Min. Engr.....940 South Windsor Blvd., Los Angeles, Cal.	'01
Hay, Robert, Lecturer in Met. Chem., The Royal Tech. College.....Glasgow, Scotland.	'26
Hayashi, Shinsaku, Chief Engr. of Engrg. Depts., Mitsui Tagawa Colliery., Gotoji, Tagawa-gun, Fukuokaken, Japan.	'23
Hayden, C. T., Gen'l Mgr., O'Gara Coal Co.....332 S. Michigan Ave., Chicago, Ill.	'23
†Hayden, Charles.....25 Broad St., New York, N. Y.	'15
Hayden, William F., Engr.....Continental Bank Bldg., Salt Lake City, Utah.	'19
†Hayes, A. L., Engr., Empire Zinc Co.....Gilman, Colo.	'26
Hayes, Albert O., Geol., Prof., Dept. of Geol., Rutgers Univ.....New Brunswick, N. J.	'24
Hayes, D. I., Mgr., Silver Dyke Min. Co.....Neihart, Mont.	'20
Hayes, F. H., Geol., Mine Supt., Copper Queen Branch, Phelps Dodge Corp.....Bisbee, Ariz.	'13
Hayes, James Edward, V.P., The New Jersey Zinc Co.....160 Front St., New York, N. Y.	'15
†Hayes, Reese Leonard, Geol., Pres., Roamer Oil Co., 256 Harvey-Snyder Bldg., Wichita Falls, Tex.	'18
Hayler, George E., Jr., Engrg. Executive, Henry L. Doherty & Co., 60 Wall St., New York, N. Y.	'16
†Haynes, C. B.....1901 Oak St., Trenton, Mo.	'23
Haynes, Chastain Wilson, Mine Operator.....Marion, Ky.	'21
Haynes, Justin H., Val. Engr., The Lloyd Thomas Co., 303 Continental Oil Bldg., Denver, Colo.	'14
Haynes, Winthrop P., Chief Geol., Foreign Producing Dept., European Branch, Standard Oil Co. of N. J., 82 Avenue des Champs Elysees, Paris, France.	'24
Hays, C. G., Engr., Lake Superior Coal Co.....Superior, W. Va.	'23
Hayward, Carle R., Assoc. Prof. of Met., Massachusetts Institute of Tech., Cambridge, Mass.	'07
†Hayward, Harold Lewis, Min. Engr., Anaconda Copper Min. Co., 619 W. Park St., Butte, Mont.	'27
Hayward, J. T., Pet. Engr.....303 Cosden Bldg., Tulsa, Okla.	'27
Hayward, James Waldemar, Oil Engr., Gen'l Sales Mgr., Dielectric Products, Inc., Newport, Del.	'23
Hayward, Marden W., Min. Engr., Cia. Minera de Penoles, Apt. 251, Monterrey, N. L., Mexico.	'17
Hazen, H. L., Cons. Met., Mgr., Humboldt Sulphur Co., 618 Crocker Bldg., San Francisco, Cal.	'20
Hazen, J. S.....Instructed to hold everything.	'20
Hazlewood, Stuart, V.P., The Midvale Co.....Nicetown, Philadelphia, Pa.	'15
†Hazzard, John C., Teaching Fellow, Dept. of Geol., Univ. of California, 2625 Hearst Ave., Berkeley, Cal.	'27
†Hazzard, Roy Thorpe, Geol.....Box 1731, Shreveport, La.	'26
Head, James L., Min. Engr., Chile Copper Co.....25 Broadway, New York, N. Y.	'15
Head, R. E., Microscopist, U. S. Bureau of Mines, Univ. of Utah....Salt Lake City, Utah.	'29
Heald, K. C., Staff Geol., The Gulf Oil Cos.....1161 Frick Bldg. Annex, Pittsburgh, Pa.	'19
Healey, Philip J., Foundation Boring & Core Drill Contr., Havemeyer Bldg., 25 Church St., New York, N. Y.	'21
†Healy, Al J., Contract. & Ventilation Engr., Butte & Superior Min. Co.....Butte, Mont.	'24
Healy, Ralph L., Min. Engr., Granby Cons. Min. Smelt. & Power Co. Ltd., 813 Birks' Bldg., Vancouver, B. C., Canada.	'16
†Hearne, Laurance F., Surveyor, Exploration Dept., New Jersey Zinc Co. & Bertha Mineral Co., Austinville, Va.	'25
Heathcote, C. F., Min. Engr., Champion Reef Gold Mines of India, Ltd., Champion Reefs, So. India.	'97
Heberlein, Kuno B., Min. Engr.....62 New Broad St., London, E. C. 2, England.	'03
Heberlein, Max, Met., International Smelt. Co.....Tooele, Utah.	'29
Heberling, William G.....311 S. Arden Blvd., Los Angeles, Cal.	'21
Hebley, Henry Frederick, Mechanical Engr., Allen & Garcia Co., 8 Market St., Pittsburgh, Pa.	'25
Hecht, Henry, Pres. & Gen'l Mgr., Alloys & Products, Inc., Oak Point Ave. & Barry St., New York, N. Y.	'25
Heckscher, A.....52 Vanderbilt Ave., New York, N. Y.	'79
Hedges, Joseph Harold, Asst. to the Dir., Bureau of Mines.....Washington, D. C.	'07
Heedy, H. Glen, Asst. to V.P., The Youngstown Sheet & Tube Co.....Youngstown, Ohio.	'27
Hegeler, Julius W.....2318 N. Vermillion St., Danville, Ill.	'92
Heggem, Alfred G., Mfr., Pres., The Oil Well Improvements Co.....Box 1432, Tulsa, Okla.	'14
Heggie, James.....328 S. Williams St., Denver, Colo.	'14
Heginbotham, J. H., Field Engr., The General Engrg. Co., Inc., 159 Pierpont St., Salt Lake City, Utah.	'29
†Heide, Harold E.....Address Wanted.	'25
Heidenreich, W. Lee., Min. Engr., Nipissing Min. Co.....165 Broadway, New York, N. Y.	'13
Heikes, George Conrad, Geol., Giesche Spolka Akcyjna.....Katowice, Upper Silesia, Poland.	'23
Heikes, Victor C.....506 Custom House Bldg., San Francisco, Cal.	'96

For explanation of symbols, see page 5.

†Heil, Carl E., Pres. & Mgr., The Continental Steel Products Co., 401 Dollar Bank Bldg., Youngstown, Ohio.	'23
Heiland, Carl August, Prof. of Geophysics, Colorado School of Mines.....Golden, Colo.	'27
Heilman, Charles G., Met. Engr., Commonwealth Heat Treating Co., 5922 Commonwealth Ave., Detroit, Mich.	'20
Hellman, Joseph C., Min. Engr., Beck Min. & Royalty Co.....Miami, Okla.	'17
Heimberger, William W., Engr., Buckeye Steel Castings Co.....Columbus, Ohio.	'27
Heimrod, Albert A., Engr., Western Precipitation Co.....25 W. 43rd St., New York, N. Y.	'16
†Heineman, Robert E. S., Asst. Geol., Arizona Bureau of Mines.....Tucson, Ariz.	'25
Heinrichs, Walter E., Chief Engr., Climax Molybdenum Co.....Climax, Colo.	'21
Heinze, F. L., Chief Engr., Beaver Creek Cons. Coal Co.....Prestonsburg, Ky.	'25
Heise, A. Roy, Mgr., Oleum Refinery, Union Oil Co. of Cal.....Oleum, Cal.	'07
†Heitmann, Albert L., Chem., Eagle-Picher Lead Co., Eagle-Picher Smelter..Henryetta, Okla.	'25
†Heitzmann, James A., McClure Jones & Co.....115 Broadway, New York, N. Y.	'24
Heizer, Ott F., Gen'l Mgr., Nevada-Massachusetts Co.....Mill City, Nev.	'14
†Helfrich, Oliver Boone, Lago Pet. Corp.....Apt. 172, Maracaibo, Venezuela.	'28
Hellberg, Edward A., Min. Engr., Oliver Iron Min. Co.....Box 406, Norway, Mich.	'23
†Heller, Clyde A., Pres., Tonopah Belmont Development Co.....Philadelphia, Pa.	'14
Heller, Ira S., Chief Draftsman, Mill. Dept., The New Jersey Zinc Co., 160 Front St., New York, N. Y.	'17
Heller, M. J., Min. Engr.....120 Broadway, New York, N. Y.	'96
†Hellerich, George, Min. Engr., Thawing Div., Hammon Cons. Gold Fields....Nome, Alaska.	'25
Hellman, Fred, Cons. Min. Engr.....149 Broadway, New York, N. Y.	'97
Hellmers, Henry B. C., Supt. of Oxide Dept., American Zinc & Chemical Co., Langloeth, Pa.	'21
†Hellestrom, Einar R. N., Min. Engr.....5 Water St., New York, N. Y.	'26
Helm, Rea C., Supt., Trenton Plant, American Steel & Wire Co., 80 Hamilton Ave., Trenton, N. J.	'19
†Helprin, Sydney E., Graduate Student in Geol., Columbia Univ.....New York, N. Y.	'28
Hemelright, Frank H. V.P., and Gen'l Mgr., Temple Coal Co., Board of Trade Bldg., Scranton, Pa.	'14
†Hemphill, John S., Min. Engr..c/o S. H. Ball, 12th Floor, 26 Beaver St., New York, N. Y.	'26
†Henderson, Alexander D., Jr., Pet. Engr., Standard Oil Co. of California, Bin XX, Taft, Cal.	'24
Henderson, Chas. W., Engr., U. S. Bureau of Mines....428 New P. O. Bldg., Denver, Colo.	'11
Henderson, Edward P., Dept. of Geol., Smithsonian Institution, U. S. National Museum, Washington, D. C.	'27
Henderson, Edwin T., Met., Broken Hill Proprietary Co..Broken Hill, N. S. W., Australia.	'05
Henderson, George M., Min. Engr., Cia. American Smelt.....Casilla 21, Copiapo, Chile.	'17
Henderson, H. P., Cons. Min. Engr., Mines Management Co., 522 Fifth Ave., New York, N. Y.	'04
†Henderson, Harry B. ....Y. M. C. A., Butte, Mont.	'29
Henderson, J. A. Leo, Min. & Cons. Engr., College Hill Chambers, Cannon St., London, E.C.4, England.	'98
Henderson, J. McClelland, Cons. Min. Engr. & Geol., Box 679, Panama City, Republic of Panama.	'96
**Henderson, Lyle H., Geol., Radiore Co.....9035 Venice Blvd., Los Angeles, Cal.	'29
†Henderson, Marshall J., Chem. Engr., American Potash & Chemical Corp....Trona, Cal.	'26
Henderson, R. M., Gen'l Mgr., Wellington Mines Co.....Breckenridge, Colo.	'13
Henderson, William Hope, Pet. Engr., Messrs. G. Beyts & Co.....Suez, Egypt.	'18
Hendricks, W. Th. M., The Caribbean Pet. Co.....Maracaibo, Venezuela.	'25
Hendricks, Robert J., Min. Geol., U. S. Smelt. Refin. & Min. Exploration Co., Salt Lake City, Utah.	'22
†Hendricks, Samuel D., Min. Engr., Christmas Copper Co.....Christmas, Ariz.	'26
Henegar, Herbert B., Engrg. Dept., California Corrugated Culvert Co....Los Angeles, Cal.	'28
Henley, A. S. ....Pottenger Sanatorium, Monrovia, Cal.	'20
†Hennen, Edward H. ....Instructed to hold everything.	'25
Hennen, Ray V. ....Morgantown, W. Va.	'21
Henning, John L., Cons. Engr., General Practice.....525 Kirby St., Lake Charles, La.	'19
Henning, Paul F., Min. Engr. ....Box 133, Cumberland, Md.	'29
Henny, Gerhard, Geol., Shell Co. of California.....Higgins Bldg., Los Angeles, Cal.	'20
†Henricksen, Ray, Dir., Tonopah Min. & Industrial School.....Tonopah, Nev.	'27
†Henry, Andrew M., Min. Engr., U. S. Gypsum Co.....Plasterco, Va.	'28
Henry, J. Thompson, Land Surveyor & Min. Engr., Martha Furnace, Center Co., Pa.	'15
Henry, Joseph S., Cons. Engr., Austral Malay Tin, Ltd.....Taiping, Perak, F. M. S.	'18
Henry, Philip W., Cons. Engr.....75 West St., New York, N. Y.	'13
Hensley, James H., Jr., Min. Engr., Asst. Mgr., Miami Copper Co....Box 100, Miami, Ariz.	'16
Henton, Hugh M., Met. Engr., Assoc. Prof. of Met., The Alaska Agricultural College and School of Mines, College, Alaska.	'20
Hepburn, Arthur E. ....Heathman Hotels, Portland, Ore.	'08
Heppenstall, C. W., Gen'l Mgr., Heppenstall Forge & Knife Co., 4620 Hatfield St., Pittsburgh, Pa.	'20

Herald, Frank A.	1805 Electric Bldg., Fort Worth, Tex.	'18
Herbert, C. F., First Aid Miner, Car No. 4, U. S. Bureau of Mines, Vincennes, Ind.		'23
Herschmer, Lawrence Theodore, Gen'l Supt., Franklin Fluorspar Co.	Rosiclare, Ill.	'24
Herivel, Ernest Ph., Mine Supt., Teziutlan Unit, The Mexican Corp., S. A.,	Aire Libre, Pue., Mexico.	'18
Herkenhoff, Gordon E., Asst. Supt., Angelus Min. & Mill. Co.	Golden, N. M.	'23
Herman, John, Assayer & Chemist	339 South Los Angeles St., Los Angeles, Cal.	'15
Hermesdorf, R. P. E., Asst. Supt., Balbach Plant, U. S. Metals Refin. Co.,	Wilson & Doremus Ave., Newark, N. J.	'17
Herndon, E. L., Treas., Eastern Steel Co.	Pottsville, Pa.	'82
Herold, Stanley C., Pet. Geol.	5344 11th Ave., Los Angeles, Cal.	'14
Heron, Charles M., Min. Engr.	Box 287, Cobalt, Ont., Canada.	'13
Heroy, William B., Executive Geol., Sinclair Exploration Co.,	45 Nassau St., New York, N. Y.	'19
Herr, Irving, Gen'l Mgr., Cia. Minera del Cubo, S. A., Apt. 49, Guanajuato, Gto., Mexico.		'28
Herreros, Hector	Pazna, Antequera, Bolivia.	'18
Herres, Otto, Jr., Min. Engr., Asst. Mgr., United States Fuel Co.,	1019 Newhouse Bldg., Salt Lake City, Utah.	'14
Herreshoff, J. B. Francis	Address Wanted.	'86
Herreshoff, J. B., Jr.	1604 Seventh St., San Diego, Cal.	'14
Herrick, Bernard C.	72 Mount Vernon St., Boston, Mass.	'23
Herron, James H., Cons. Met. Engr., Pres., The James H. Herron Co.,	1360 West Third St., Cleveland, Ohio.	'14
Hersam, Ernest A., Prof. of Met., Univ. of California	Berkeley, Cal.	'99
Hersey, Lynn F., Chief Engr., The Phelps Dodge Corp., Morenci Branch	Morenci, Ariz.	'22
Hershberger, Harry, Colliery Engr., The Hudson Coal Co.	Scranton, Pa.	'20
Hershey, Oscar H., Min. Geol., Hershey & White	924 Crocker Bldg., San Francisco, Cal.	'16
Hertel, F. W., Pet. Engr., Associated Oil Co.	Ventura, Cal.	'29
Herty, Charles H., Jr., Hunt Award A.I.M.E. 1928; Physical Chem., Pittsburgh Experiment Sta., U. S. Bureau of Mines, 4800 Forbes St., Pittsburgh, Pa.		'25
Hertzog, E. L., Mine Operator	Box 230, Spartanburg, S. C.	'25
Herz, Nathaniel, Chem., Homestake Min. Co.	Lead, S. D.	'09
Heskett, John A., Met., Mgr., Onakaka Iron & Steel Co., Ltd.,	Box 12, Collingwood, New Zealand.	'15
Hess, Edwin W., Cons. Engr.	Room 2-6, Murray Bldg., Clearfield, Pa.	'13
Hess, Frank L., Geol., Chief, Rare Metals & Non-Metals Div., U. S. Bureau of Mines,	Washington, D. C.	'07
Hess, Leon Ralph, Research Chem., Standard Oil Co.	Richmond, Cal.	'29
Hess, Oliver P., Registered Professional Engr. & Land Surveyor, associated with E. W. Hess, 400-401 Deposit National Bank Bldg., Du Bois, Pa.		'19
Hess, Robert M., Gauger Foreman & Chem., Shell Pet. Corp.	Cushing, Okla.	'26
Hesse, Alfred William, Chief Coal Min. Engr., The Youngstown Sheet & Tube Co.,	Nemacolin, Pa.	'23
Heuberger, R. E.	c/o C. E. Howell, R.F.D. 5, Pontiac, Mich.	'27
Heuer, R. P., Dir. of Research, General Refractories Co.,	106 South 16th St., Philadelphia, Pa.	'23
Hewett, Donnel F., Geol., U. S. Geological Survey	Washington, D. C.	'08
Hewgill, Russell, Mill Foreman, Northern Peru Min. & Smelt. Co.,	Casilla 162, Trujillo, Peru.	'29
Hewitt, C. L., Met. Engr.	Rooms 3 & 5, Montana Bldg., Helena, Mont.	'18
Hewitt, Erskine, Sec., Pequest Co.	Room 1750, 50 Church St., New York, N. Y.	'05
Hey, Harry, Chief Met., Electrolytic Zinc Co. of Australasia, Ltd.,	Box 856 K., G. P. O., Melbourne, Vic., Australia.	'27
Heymans, William J.	134 Boulevard Lambert, Brussels, Belgium.	'27
Hibbard, Henry D., Cons. Engr., Howe Memorial Lecturer 1928,	144 East Seventh St., Plainfield, N. J.	'79
Hibbard, Walter R., Technical Dept., American Brass Co.	Waterbury, Conn.	'19
Hibbert, Ernest, Mgr., Horne Copper Co.	Noranda, Que., Canada.	'06
Hickok, Charles Nelson, Sales Mgr., The M. A. Hanna Co.,	1800 Leader News Bldg., Cleveland, Ohio.	'14
Hickok, Kenneth E., Min. Engr.	c/o L. J. Rosenshine, Casilla 1825, Lima, Peru.	'26
Hicks, Charles M., Min. Engr., Ore Dept., Grasselli Chem. Co.	Cleveland, Ohio.	'04
Hicks, Frank V., The Union Pacific Coal Co.	Superior, Wyo.	'28
Hicks, J. M.	Box 267, Scranton, Pa.	'19
Hicks, John R., Engr. & Assoc., Howard N. Eavenson & Associates,	1302 Union Trust Bldg., Pittsburgh, Pa.	'21
Hieber, Carlos A., Met., Banner Dev. Co.	Calistoga, Cal.	'28
Hiers, George O., Met., Research Laboratories, National Lead Co.,	105 York St., Brooklyn, N. Y.	'21
Higgins, A. Howard, Cons. Met.	62 London Wall, London, E.C.2, England.	'15
Higgins, Charles Henry, Head, Dept. of Science, Salem College	Winston-Salem, N. C.	'21

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Higgins, D. F., Geol., The Texas Production Co.....	Box 2100, Denver, Colo.	'26
Higgins, Edwin, Managing Dir., California Oil & Gas Association,	410 Chamber of Commerce Bldg., Los Angeles, Cal.	'09
Higgins, Eugene P., Engr., Cross & Brown Co.....	270 Madison Ave., New York, N. Y.	'25
Higgins, John W., Steel Mfr., Pres. & Treas., Worcester Pressed Steel Co.,	100 Barber Ave., Worcester, Mass.	'25
Higgins, L. T., Asst. Mill Supt., Braden Copper Co.....	Sawell, Chile.	'15
Higgins, Raymond W., Dir., Shattuck-Denn Min. Corp., & Treas., Kelley How Thomson Co.,	Duluth, Minn.	'23
Higgs, Horace H., Auditor, Utah-Apex Min. Co.....	Bingham Canyon, Utah.	'29
Highriter, Harry W., Research Engr., The Eastern Malleable Iron Co., Naugatuck Malleable Iron Wks., Naugatuck, Conn.		'29
Higley, Roy Carlton, Moctezuma Copper Corp.....	Nacozari, Son., Mexico.	'17
Hilby, George R. ....	520 Taylor St., San Francisco, Cal.	'25
Hilbreth, Thomas F., Sec. & Treas., Davidson Ore Min. Co., 403 White Bldg., Buffalo, N. Y.		'05
Hill, Erle G., Prof. of Met., Univ. of Pittsburgh.....	Pittsburgh, Pa.	'28
Hill, Frank A., Min. & Cons. Engr.....	Arctic Club, Seattle, Wash.	'05
Hill, Harry Blackburn, Pet. Engr., U. S. Bureau of Mines, 308 Federal Bldg., Dallas, Tex.		'25
Hill, Harry H., In charge Production Engrg., Standard Oil Development Co.,	Room 1512, 26 Broadway, New York, N. Y.	'26
Hill, Harry P., Min. Engr., Supt., Bonanza Unit, Cia. Minera Asarco, S. A.,	Avalos, Zac., Mexico.	'19
Hill, J. M., Engr. in Charge, Div. of Mineral Resource & Statistics, U. S. Bureau of Mines,	501 Custom House, San Francisco, Cal.	'17
Hill, Robert S., Tin Prospection in Ruanda-Urundi, Forminiere,	40 Rue Royale, Brussels, Belgium.	'19
Hill, Stacy H., Mgr., Ingersoll-Rand Co.....	717 Providence Bldg., Duluth, Minn.	'15
Hill, Walter Hovey, Cons. Engr.....	200 Pinney Bldg., Boise, Idaho.	'00
Hillhouse, W. B., Chief Mine Inspector, State of Alabama,	425 Lincoln Life Bldg., Birmingham, Ala.	'27
Hilliard, Clayton A., Min. Statistician, Hornblower & Weeks,	60 Congress St., Boston, Mass.	'21
Hilliard, William A., Min. Engr., Enterprise Gold Min. Co.....	Magalia, Cal.	'21
Hillman, Victor E., Dir. of Research, Crompton & Knowles Loom Wks.,	93 Grand St., Worcester, Mass.	'22
Hills, La Mar S., Student, Univ. of Utah.....	Salt Lake City, Utah.	'25
Hills, Victor G., Engr., Cyprus Mines Corp.....	Skouriotissa, Nicosia, Cyprus.	'96
Hilpert, Ralph E., Engr., Silurian Oil Co.....	Box 396, Oilton, Okla.	'27
Hilton, Alan Forest, Met., Farrel B'mingham, Inc.....	Ansonia, Conn.	'28
Himrod, Edwin H., Mine Shaft Boss, New York & Honduras Rosario Min. Co.,	Rosario, San Juancito, Honduras, C. A.	'28
Hinckley, Leland.....	c/o Fresno Co., Fresno, Cal.	'25
Hindes, Earle P., Gen'l Rep., Empire Gas & Fuel Co.....	Box 389, Bartlesville, Okla.	'20
Hines, Pierre R., Engr.....	209 Porter Bldg., Portland, Ore.	'16
Hintze, Albert Frederick, San Luis Min. Co.....	Estacion Dimas, Sin., Mexico.	'26
Hiraoka, Michiya, Pres., Akita Min. College.....	Tegata, Akita City, Japan.	'16
Hird, Mrs. Anna Nicholson, Research Chem., National Malleable & Steel Castings Co.,	10600 Quincy Ave., Cleveland, Ohio.	'25
Hird, Malcolm S., Met., American Cyanamid Co., Graphite Wks....	Box 127, Linden, N. J.	'24
Hirschberg, Charles Austin, Gen'l Sales Mgr., Gilman Mfg. Co.,	125 Prescott St., East Boston, Mass.	'21
Hirsh, Ralph T., Chief Engr., New York-Alaska Gold Dredging Co.,	Bear Creek, Kuskokwim Valley, Alaska.	'18
Hirshfeld, C. F., Chief, Research Dept., The Detroit Edison Co.,	2000 2nd Ave., Detroit, Mich.	'20
Hirshler, Louis, Met. Engr., Pres. & Gen'l Mgr., Hirshler Metals Co.,	25 Broadway, New York, N. Y.	'24
Hirtzel, Marion Charles, Min. Engr., El Potosi Min. Co.....	Chihuahua, Chih., Mexico.	'23
Histed, Howard, Wellington Mines Co.....	Breckenridge, Colo.	'28
Hitchcock, Charles K., Min. Engr., St. Joseph Lead Co.....	Bonne Terre, Mo.	'17
Hitchcock, (Miss) Fanny Rysam Mulford.....	Warwick, Orange Co., N. Y.	'20
Hitchon, Thomas, Geol., The Burmah Oil Co., Ltd.....	Chauk, Upper Burma, India.	'26
Hite, Thomas H.....	315 So. Van Buren St., Moscow, Idaho.	'26
Hitzrot, Henry William, Met., The Dorr Co.....	247 Park Ave., New York, N. Y.	'28
Hixon, Harold G., Met.....	Depue, Ill.	'15
Hixon, Hiram W.....	Hotel Marquis, 12 E. 31st St., New York, N. Y.	'20
Ho, Chee Kin.....	41 Queen's Rd., C., Hong Kong, China.	'19
Hoag, Edward H., Min. Engr., Mgr., Cia. Minera de Nuestra Senora, S. A.,	Cosala, Sin., Mexico.	'23
Hoal, J. C., Met., Chemical & Metallurgical Corp.....	Runcorn, England.	'20
Hoar, Frederic W., Min. Engr. and Met.....	Box 1959, Globe, Ariz.	'02

Hoard, Carlyle M., Student, West Virginia Univ.....	Morgantown, W. Va.	'27
Hoard, H. J.....	Address Wanted.	'23
Hoatson, Chester, V.P. & Mgr., Belmont Copper Min. Co.....	Box H, Superior, Ariz.	'24
Hobart, E. Norris, Min. Engr., Traveling Rep., Mexican Min. Dept., American Smelt. & Refin. Co., 1112 Mills Bldg., El Paso, Tex.		'14
Hobart, R. E., Mech. Supt., Lehigh Coal & Navigation Co.....	Lansford, Pa.	'16
Hobson, George Vernon, Asst. Supt., Geol. Survey of India.....	Chowringhee, Calcutta, India.	'21
†Hochschild, Harold K., V.P. & Sec., The American Metal Co., Ltd., 61 Broadway, New York, N. Y.		'29
Hochschild, Sali, Min. Engr.....	Casilla 2865, Santiago, Chile.	'25
†Hochschild, Walter, The American Metal Co., Ltd.....	61 Broadway, New York, N. Y.	'26
Hocking, Richard O., Gen'l Supt., Butler Bros.....	Cooley, Minn.	'14
Hodge, A. Cairn.....	Address Wanted.	'89
Hodge, James M., Engr. & Geol.....	19 Exeter St., Boston, Mass.	'88
Hodge, John E., Cons. Min. Engr., Pres. & Gen'l Mgr., John E. Hodge, Inc., 1001 Haas Bldg., Los Angeles, Cal.		'15
Hodges, A. B. W., Met. Engr.....	136 South Arden Blvd., Los Angeles, Cal.	'89
†Hodges, Parke Abernethy, Braden Copper Co.....	Rancagua, Chile.	'27
†Hodgson, John F., Asst. Mgr., Turiguano Dev. Co.....	Mercado Unico, Havana, Cuba.	'21
Hodgson, Joseph P., Mgr., Copper Queen Branch, Phelps Dodge Corp.....	Bisbee, Ariz.	'13
Hodson, Frank, Met. Engr., Pres., Empire Steel Casting Co.....	Reading, Pa.	'19
Hoekstra, J. A., Min. Engr., Bataafsche Petroleum Co.....	The Hague, Holland.	'28
Hoen, Will M., Oglebay Norton & Co.....	Ironwood, Mich.	'21
Hoffacker, B. F., Engr. & Geol.....	1414 Park Bldg., Pittsburgh, Pa.	'26
Hoffman, A. A., Asst. Gen'l Mgr., Andes Copper Min. Co., Potrerillos, via Antofagasta, Chile.		'17
Hoffman, Paul, Engr., Ingersoll-Rand Co.....	11 Broadway, New York, N. Y.	'20
Hoffman, Robert B., Chief of Service Dept., Mineral Point Zinc Co.....	Depue, Ill.	'16
Hoffman, Robert D., Min. Geol.....	Room 702, 452 Fifth Ave., New York, N. Y.	'20
Hoffmann, Karl F., Cons. Engr.....	120 Broadway, New York, N. Y.	'12
Hoffmann, Ross B., Min. Engr.....	228 Perry St., Oakland, Cal.	'14
Hoffmann, Rudolf, Prof. Dipl. Ing., Deutschland.....	Erzstrasse 876, Clausthal i.H., Germany.	'27
Hofstrand, O. B., Met. & Constr. Engr.....	619 Newhouse Bldg., Salt Lake City, Utah.	'12
†Hogan, Eugene N., Asst. Foreman, Emma Mine, Anaconda Min. Co.....	Butte, Mont.	'16
Hogle, James A., Bond Dealer & Stock Broker, J. A. Hogle & Co., 169 Main St., Salt Lake City, Utah.		'25
Hogboom, William C., Structural Engr., City of Los Angeles, 657 City Hall, Los Angeles, Cal.		'14
†Hohloff, William Theodore, Carter Oil Co.....	Box 997, Seminole, Okla.	'25
Hoke, C. M., (Miss) V.P., Hoke Inc.; Cons. Chem., Jewelers Technical Advice Co., 22 Albany St., New York, N. Y.		'29
Holbrook, E. A., Dean, School of Engrg. & Mines, Univ. of Pittsburgh.....	Pittsburgh, Pa.	'08
Holden, Edwin C., Cons. Min. Engr.....	1100 Garrett Bldg., Baltimore, Md.	'97
Holden, Roy J., Prof. of Geol., Virginia Polytechnic Institute.....	Blacksburg, Va.	'08
Holden, Stephen Moss, Engr. & Designer, 42 Bannerdale Rd., Abbeydale, Sheffield, England.		'22
Holder, Grover C., Foster Wheeler Corp.....	Carteret, N. J.	'18
Holderer, George B., Min. Engr., Air Reduction Co.....	342 Madison Ave., New York, N. Y.	'12
Holgate, Thomas E.....	173 Blackburn Rd., Darwen, England.	'92
Holland, A. A., Cons. Engr.....	3 St. Leonards Ave., Toronto, Ont., Canada.	'18
†Holland, Charles T., H. E. Willson Engrg. Co.....	Winona, W. Va.	'27
Holland, L. F. S., Min. Engr.....	1768 N. La Brea Ave., Hollywood, Cal.	'01
†Holland, Robert H., Met., American Smelt. & Refin. Co., Garfield Smelter, Garfield, Utah.		'24
Holley, Carlos E., Mech. & Elect. Supt., Calumet & Hecla Smelt. Wks.....	Hubbell, Mich.	'22
†Hollinshead, Earl D.....	942 S. 12th St., Allentown, Pa.	'28
Hollis, Charles B., Supt., Eastern Tale Co.....	Box 489, Randolph, Vt.	'10
Hollis, Geoffrey C.....	29, Alexandra Rd., Reading, Berks, England.	'06
Hollis, H. L., Cons. Min. Engr.....	1549 Railway Exchange, Chicago, Ill.	'85
Hollman, E. G., Research Lab., Eagle-Picher Lead Co.....	Joplin, Mo.	'23
Holloway, W. S.....	Address Wanted.	'03
Holman, Alexander D., Promoting Engr.....	Apt. D 6, Ocean City, N. J.	'23
Holman, Francis C., Saving Union Branch, Mercantile Trust Co., 1 Grant Ave., San Francisco, Cal.		'81
Holme, Percy E., Asst. Mgr., Patino Mines & Enterprises Cons., Inc.....	Llallagua, Bolivia.	'14
Holmes, Frank J.....	Box 19, High Rolls, N. M.	'26
Holmes, Grant, Mfr., Pres., Robert Holmes & Bros., Inc.....	30 Hazel St., Danville, Ill.	'19
Holmes, Henry P.....	220 N. 9th St., Corvallis, Ore.	'26
Holmes, John A., Min. Engr., Albuquerque & Cerrillos Coal Co.....	Madrid, N. M.	'24
Holmes, Joseph Austin, 2nd., Pet. Engr., Pan American Pet. & Transport Co., 122 E. 42nd St., New York, N. Y.		'17
†Holmes, S. W., Sub-surface Geol., The Empire Co.....	Box 1605, Holdenville, Okla.	'26

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†Holmquist, George F., Engr., New Departure Mfg. Co.....	Bristol, Conn.	'23
Holsapple, Lloyd, Pet. Engr., Sinclair Oil & Gas Co.....	Box 877, Seminole, Okla.	'26
Holstein, George M., Trustee, Clyde Estates.....	Room 25, 177 Montague St., Brooklyn, N. Y.	'18
Holstein, L. S., Chem., New Jersey Zinc Co.....	160 Front St., New York, N. Y.	'15
Holt, Marmaduke B., Min. Engr.....	310 Guardian Trust Bldg., Denver, Colo.	'89
Holt, Stephen Philip.....	103 F St., Salt Lake City, Utah.	'20
Holt, Theodore P., Met. Engr.....	313 Turnbull Dr., Whittier, Cal.	'14
Holtz, Jehiel, Chloridizing Dept., The Pyrites Co., Ltd.....	Wilmington, Del.	'27
Holzworth, C. R., Frontier Bronze Corp.....	Niagara Falls, N. Y.	'15
Horne, William L., Min. Engr.....	53 Sussex Rd., Tenafly, N. J.	'19
Homer, Dudley Denison, Gen'l. Mgr., Minas de Matahambre,	Matahambre, Pinar del Rio, Cuba.	'20
Homerberg, Victor O., Assoc. Prof. of Physical Met.,	Room 8-303, Mass. Inst. of Tech., Cambridge, Mass.	'29
†Honeyman, Robert Brodhead, V.P., Brodhead Coal & Land Co.,	61 Broadway, New York, N. Y.	'20
Honnold, W. L., Min. Engr.....	1210 Pacific Mutual Bldg., 523 W. 6th St., Los Angeles, Cal.	'93
Hood, B. B.....	Box 515, Southport, Conn.	'15
Hood, Karl Kedzie, General Chemical Co.....	40 Rector St., New York, N. Y.	'29
Hood, Ozni P.....	1831 Irving St., N.W., Washington, D. C.	'01
Hood, Richard Haden.....	145 N. Rossmore Ave., Los Angeles, Cal.	'23
Hook, Carl Robert, Min. Engr.....	Luossavaara-Kiirunavaara Aktiebolag, Kiruna, Sweden.	'20
Hook, Charles R., V.P. & Asst. Gen'l Mgr., The American Rolling Mill Co.,	Middletown, Ohio.	'18
Hook, Ira Thomas, Test Engr., The American Brass Co.....	Ansonia, Conn.	'27
Hooker, Brian, Min. Engr.,	c/o J. H. Hooker, Australian Mutual Provident Soc., Melbourne, Vic., Australia.	'96
Hooper, Frank C., Met. Engr., Mgr., Barton Mines Corp....	North Creek, Warren Co., N. Y.	'03
†Hoover, Dudley A., Met.....	119 W. Tupper St., Buffalo, N. Y.	'28
Hoover, H. Earl, V.P., The Hoover Co.	2300 Willoughby Tower, 8 S. Michigan Ave., Chicago, Ill.	'18
HOOPER, HERBERT, William Lawrence Saunders Medallist, A.I.M.E., 1928; John	Fritz Medallist, 1929; Room 2000, 42 Broadway, New York, N. Y.	'96
Hoover, Paul K., Braden Copper Co.....	Rancagua, Chile.	'26
Hoover, Ray P., Gen'l Mgr., Hoover & Mason Phosphate Co.,	2300 Willoughby Tower, 8 S. Michigan Ave., Chicago, Ill.	'19
†Hoover, Rodney B., Research Engr.....	1640 5th St., Muskegon, Mich.	'28
Hoover, Theodore J., Prof. of Min. & Met., Dean, School of Engrg., Stanford Univ.,	Stanford University, Cal.	'00
†Hoover, William B., Geol., Humble Oil & Refin. Co.....	Amarillo, Tex.	'28
Hope, Lapsley W., Min. Engr.....	Route 6, Box 10, Chattanooga, Tenn.	'18
†Hope, Lawrence I., Jr. Asst. Engr., City Engr's Office....	203 City Hall, Minneapolis, Minn.	'22
Hopkins, A. S. J., Asst. Gen'l Mgr., Amherst Coal Co.....	Amherstdale, W. Va.	'23
Hopkins, E. W., Oglebay Norton & Co.....	Gogebic National Bank Bldg., Ironwood, Mich.	'15
Hopkins, Edwin B., Cons. Pet. Geol.....	25 Broadway, New York, N. Y.	'18
Hopkins, J. E., Asst. Mgr. in charge of Dredging, Fairbanks Exploration Co.,	Fairbanks, Alaska.	'20
Hopkins, James.....	Coro, Venezuela.	'21
Hopkins, Robert H.....	Box 243, Quincy, Fla.	'19
Hopper, Walter E., Arkansas Natural Gas Corp.....	Ardis Bldg., Shreveport, La.	'11
†Hoppock, Harland H.....	Tamatave, Madagascar.	'19
†Horcasitas, A. S., Mine Foreman, Cia. Industrial "El Potosi S. A.,"	Apt. 13, Chihuahua, Chih., Mexico.	'13
Hore, Reginald Edwin, Cons. Geol.....	Oakville, Ont., Canada.	'26
Horgan, Matthew W., Gen'l Supt., Harper Coal Co.....	Box 101, Shinnston, W. Va.	'23
Horihe, Y., Met. Engr., Mitsubishi Smelter, Naoshima Nr. Uno Port Okayamaken, Japan.		'20
Horiuchi, T., Meiji Min. Co., Ltd., Tobata.....	Fukuokaken, Japan.	'21
Horle, Ariel F., Chief Engr., American Smelt. & Refin. Co..	Apt. 85, Parral, Chih., Mexico.	'26
Horn, George J.....	1047 E. 20th Ave., Denver, Colo.	'19
Horne, Joseph A., V.P., Charge of Prod., The Yale & Towne Mfg. Co....	Stamford, Conn.	'18
Horner, Preston K., Min. & Met. Engr., Walter G. Perkins & Preston K. Horner,	62, London Wall, London, E.C.2, England.	'19
Horner, William L.....	805 Humble Bldg., Houston, Tex.	'28
Hornor, Carl L., Civ. & Min. Engr., Hornor Bros.....	314 W. Main St., Clarksburg, W. Va.	'27
Hornor, R. R., Min. Engr.....	142 E. Main St., Clarksburg, W. Va.	'17
Horsburgh, James, Chairman, N. Australia Commission, Commonwealth of Australia,	Darwin, N. Australia.	'05
Horton, Herman H., Mgr., The Moctezuma Copper Co.....	Nacozari, Son., Mexico.	'27
Horwedel, Charles Richard, Met., Thompson Products, Inc.,	2196 Clarkwood Ave., Cleveland, Ohio.	'27



# 72 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Horwood, C. Baring, Cons. Min. & Met. Engr., 401-402 Abbey House, Victoria St., London, S.W.1, England.	'08
Horwood, E. J., Broken Hill Prop. Co., Stock Exchange Bldg., Little Collins St., Melbourne, Vic., Australia.	'93
Hoskin, Arthur Joseph.....6801 Clyde Ave., Chicago, Ill.	'08
Hosking, William J., Mgr., Granada-Rouyn Min. Co., Ltd.....Rouyn, Que., Canada.	'29
Hoskins, William, Chem. and Assayer, Mariner & Hoskins, 2009 Harris Trust Bldg., Chicago, Ill.	'87
Hosler, Rush N., Supervisor, Coal Schedule Rating.....Box 46, Harrisburg, Pa.	'17
Hoster, M. T., Supt., French Creek Mines, E. & G. Brooke Iron Co.....St. Peters, Pa.	'19
Hostetter, Allard, Gen'l Supt. of Coal Mines, Manhattan Coal Co.....Nelsonville, Ohio.	'27
†Hotchkiss, Harry.....5522 Kenmore Ave., Chicago, Ill.	'17
Hotchkiss, Merritt W., 1511 Bank of Hamilton Bldg., 67 Younge St., Toronto, Ont., Canada.	'11
Hotchkiss, W. O., Pres., Michigan College of Mines.....Houghton, Mich.	'17
Holz, Walter, Lecturer in Pet. Geol., Univ. of Basle.....Basle, Switzerland.	'26
Houck, Charles B., V.P. and Gen'l Mgr., W. B. & H. R. R.....Hazleton, Pa.	'11
Hough, D. L.....51 E. 42nd St., New York, N. Y.	'16
Houk, Lawrence G.....508 Investment Bldg., Pittsburgh, Pa.	'28
Houle, Albert J., Mech. Engr., Moctezuma Copper Co.....Box 19, Nacozari, Son., Mexico.	'17
Houle, Arthur.....1303 E. 5th St., Tucson, Ariz.	'17
Houser, J. N., Gen'l Mgr., Tennessee Copper Co.....Copperhill, Tenn.	'12
Houston, David Fleming, V.P., Houston Coal Co.....1522 Union Trust Bldg., Cincinnati, Ohio.	'26
Houston, Fred K., Pet. Engr., Maple Leaf Oil & Refin. Co., Ltd.....Coutts, Alta., Canada.	'25
Houston, J. C., Min. Engr.....Haileybury, Ont., Canada.	'17
Houwert, F. J., Director of The Billiton Co.....Prinsessegracht 21, The Hague, Holland.	'23
Hover, D. L. C., Sec., New Mexico State Board of Pharmacy.....Cloudercroft, N. M.	'14
Hovland, John.....3649 44th Ave., S. W., Seattle, Wash.	'23
Howald, Ferdinand, Min. Engr.....78 Park Drive, Columbus, Ohio.	'84
Howard, James H., Mgr., Amparo Mining Co.....Etzatlán, Jal., Mexico.	'16
Howard, L. Ogilvie, Supt., International Smelting Co.....Miami, Ariz.	'14
Howard, Leslie E., Met., Simonds Saw & Steel Co.....Lockport, N. Y.	'14
Howard, Louis Orrin, Min. Engr.....1905 Indiana Ave., Pullman, Wash.	'14
Howard, T. C. L.....P. O. Beatrice, S. Rhodesia, Africa.	'21
*Howard, Victor, Jr. Min. Engr., Anaconda Copper Min. Co.....Butte, Mont.	'29
Howard, W. H., Cons. Engr., American Smelt. & Refin. Co.....Salt Lake City, Utah.	'95
Howbert, Van Dyne, Min. Engr., The American Metal Co., Ltd., 61 Broadway, New York, N. Y.	'23
Howe, Albion S., Min. Engr., Supt., The Central Eureka Min. Co....Sutter Creek, Cal.	'00
Howe, Ernest, Geol.....Litchfield, Conn.	'09
Howe, R. E., Gen'l Supt., Cananea Cons. Copper Co. S. A.....Cananea, Son., Mexico.	'17
†Howell, Richard P., Geol.....Kenmore Ave. & Tioga St., Bethlehem, Pa.	'21
Howell, Spencer P., Explosives Engr., Bureau of Mines.....Washington, D. C.	'25
Howells, George A., Special Representative, Ingersoll-Rand Co., 11 Broadway, New York, N. Y.	'08
Howes, Warren L., Fellow, U. S. Bureau of Mines & Graduate Student, Missouri School of Mines, Rolla, Mo.	'29
Howie, Howard, Gen'l Supt., Roane Iron Co.....Rockwood, Tenn.	'21
Hoyle, Charles, Resident Mgr., Cia. de Cobre Magistral Ameca, S. A., Box 7, Ameca, Jal., Mexico.	'16
Hoyt, Elton, 2nd, Member of Firm, Pickands, Mather & Co., 2000 Union Trust Bldg., Cleveland, Ohio.	'28
†Hoyt, Henry Sears, Partner, A. Milne & Co.....745 Washington St., New York, N. Y.	'24
†Hoyt, James King, Jr., Sales Mgr., A. Milne & Co., 745 Washington St., New York, N. Y.	'23
Hoyt, John Terrell, V.P., Oliver United Filters, Inc.....33 W. 42nd St., New York, N. Y.	'27
Hoyt, Philip S., Geol. & Min. Engr.....Las Tablas, N. M.	'21
Hoyt, Samuel L., Research Lab., General Electric Co.....Schenectady, N. Y.	'19
Hruby, Milton, Asst. Geol., Rio Bravo Oil Co., 529 Commercial Bank Bldg., Houston, Tex.	'26
Hsu, Pen Chun, Shih Pai Lou.....Yangchow, Kiangsu, China.	'26
Hsu, Sheu Chin.....Songlin, Huchow, Chekiang, China.	'16
Hubbard, Bela, Geol., Creole Pet. Corp.....Room 1560, 26 Broadway, New York, N. Y.	'19
*Hubbard, Charles R., Student, Missouri School of Mines & Met.....Rolla, Mo.	'29
Hubbard, Mark Egerton, Cyprus Mines Corp.....Island of Cyprus, Europe.	'29
Hubbard, William E., Div. Geol., Humble Oil & Refin. Co.....Amarillo, Tex.	'18
Hubbard, William H., Jr., Mech. Engr., Nichols Copper Co.....25 Broad St., New York, N. Y.	'18
Hubbell, A. H., Min. Engr., Assoc. Editor, <i>Engrg. &amp; Min. Journal</i> , 10th Ave. & 36th St., New York, N. Y.	'22
Huber, Charles F., Pres., Lehigh & Wilkes-Barre Coal Co.....16 S. River St., Wilkes-Barre, Pa.	'11
Huber, Philip.....430 Breed Ave., San Leandro, Cal.	'21
Huddle, Charles R., Min. Engr. & Supt., Ivanhoe Min. & Smelt. Corp.....Ivanhoe, Va.	'16
Hudson, E. J., Mgr., Pioneer Furnace Dept., The Cleveland-Cliffs Iron Co., Marquette, Mich.	'21

For explanation of symbols, see page 5.

Hudson, Frank S., Geol.....	1625 Opechee Way, Glendale, Cal.	'21
Hudson, Roy C., Lieut., U. S. Navy, U.S.S. Saratoga, c/o Postmaster, San Pedro, Cal.		'28
Huefner, Otto A., Min. Engr., Bunker Hill & Sullivan Min. & Conc. Co., Box 93, Kellogg, Idaho.		'27
Huey, Richard K., Gen'l Supt. of Production, Shaffer Oil & Refin. Co., 424 South Cheyenne, Tulsa, Okla.		'28
†Huff, William Erlin, Contract Auditor, The Moctezuma Copper Co., Pilares, Son., Mexico.		'28
†Huffman, Daniel E., Met. Chem., Southwestern Engrg. Corp., 4800 Santa Fe Ave., Los Angeles, Cal.		'21
Hughes, A. D., Min. Engr., Bahia Corp.....	8 W. 40th St., New York, N. Y.	'23
Hughes, H. H., Jr., Min. Engr., Memphis Corp.....	Box 30, Las Cruces, N. M.	'19
Hughes, James Hosie, Cons. Min. Engr., Hughes, Moore & Sterling, 504-506 Second National Bank Bldg., Wilkes-Barre, Pa.		'24
Hughes, John Albert, Cons. Engr., Soc. Min. Backus y Johnston del Peru....	Casapalca, Peru.	'28
Hughes, Karl S., The Hudson Coal Co., Marvine Colliery.....	Scranton, Pa.	'20
Hughes, Robert W., Chief Mine Engr., Miami Copper Co.....	Box 100, Miami, Ariz.	'26
Hugill, O. H., Asst. Supt., Blast Furnaces, Indian Iron & Steel Co., Asanso, Bengal, India.		'20
Hugon, Edward C., Min. Engr., Lester House, Wilmslow Rd., Withington, Lancs., England.		'09
†Hukill, Francis W., Engr., Atlas Portland Cement Co.....	25 Broadway, New York, N. Y.	'21
†Huleatt, William P., Min. Engr., Asst. Prof. of Geol., Colorado School of Mines, Golden, Colo.		'20
Hulick, Charles E., Treas., Easton Coal & Lumber Co.....	Easton, Pa.	'02
†Hulick, William H., V.P., Warren Foundry & Machine Co.....	11 Broadway, New York, N. Y.	'82
Hulin, Carlton D., Cons. Geol., Asst. Prof. of Geol., Univ. of California, 102 Bacon Hall, Berkeley, Cal.		'19
Hull, Daniel R., The American Brass Co.....	Waterbury, Conn.	'16
Hull, J. P. D., Business Mgr., American Association of Pet. Geols.....	Box 1852, Tulsa, Okla.	'13
Hull, John D., Engr., Ingle Gold Co.....	353 Colman Bldg., Seattle, Wash.	'26
Hull, M. R., Engrg. Dept., Chile Exploration Co.....	Anaconda, Mont.	'16
Hulse, Albert J., Asst. Chief Engr., H. A. Brassert & Co., 310 S. Michigan Ave., Chicago, Ill.		'28
Hulst, G. P., American Smelt. & Refin. Co., Perth Amboy Plant.....	Perth Amboy, N. J.	'14
Hultgren, Axel, Met. Engr., Stora Kopparbergs Bergslags A. B.....	Soderfors, Sweden.	'20
Hultgren, Ralph Raymond, Research Fellow, Intermountain Experiment Station of Bureau of Mines, University of Utah, Salt Lake City, Utah.		'28
†Humbert, Frank U., Min. Engr.....	405 Alleghany St., Clifton Forge, Va.	'10
†Hummel, Frank A., Draftsman, Gulf Pipe Line Co., Room 1464, Frick Bldg. Annex, Pittsburgh, Pa.		'28
Humphrey, Charles, Min. Engr., Surface Inspector & Safety Engr., Hollinger Cons. Gold Mines, Ltd., Timmins, Ont., Canada.		'85
Humphrey, E. P., Gen'l Mgr., Hazle Brook Coal Co.....	Jeddo, Pa.	'16
Humphrey, George M., V.P., M. A. Hanna & Co., 1300 Leader News Bldg., Cleveland, Ohio.		'22
Humphrey, George S.....	27 Pine St., New York, N. Y.	'84
Humphrey, H. B., Engr., United Verde Extension Min. Co.....	Box 681, Jerome, Ariz.	'26
Humphrey, John M., Pres., The Lehigh Valley Coal Co., 133 North River St., Wilkes-Barre, Pa.		'07
Humphrey, Ravaud Hovey.....	1057 Monadnock Bldg., San Francisco, Cal.	'20
Hundeshagen, Ludwig, Min. Engr., c/o Dr. F. Hundeshagen, 78, Herdweg, Stuttgart, Germany.		'05
Hundley, O. B., Met. Cons., Chilean Government; Prof. of Met., Univ. of Chile, Santiago, Chile.		'21
Huneke, Albert J., Mine Examinations.....	1526 Fifth Ave., Los Angeles, Cal.	'20
Hunner, Earl E., Gen'l Mgr., Lake Superior Dist. Iron Mines, The M. A. Hanna Co., 909 Fidelity Bldg., Duluth, Minn.		'18
Hunt, Homer M., Min. Engr., Dept. of Min. Engrg., Anaconda Copper Min. Co., Water Co. Bldg., Butte, Mont.		'22
Hunt, John E., Mill Supt., Teziutlan Unit, The Mexican Corp. S. A., Aire Libre, Pue., Mex.		'27
Hunt, Leonard W., Geol., Inspector, California State Min. Bureau....	Drawer N, Taft, Cal.	'28
†Hunt, R. C., Attorney at Law.....	165 Broadway, New York, N. Y.	'18
Hunt, Richard N., Min. Geol., Chief Geol., United States Smelt. Refin. & Min. Co., 816 Newhouse Bldg., Salt Lake City, Utah.		'20
Hunter, Campbell Murray, Cons. Engr. & Oil Min. Expert, 4 London Wall Bldgs., London, E.C., England.		'21
†Hunter, Frank M., Engr., Loxite Div., Keith Dunham Co., 110 S. Dearborn St., Chicago, Ill.		'22
Hunter, H., Min. Engr., Pres., Taio Gold Min. Co., Ltd., No. 1, Enokizaka, Machi, Akasaka-Ku, Tokyo, Japan.		'04
Hunter, John H., Asst. Gen'l Mgr., Burmah Oil Co., Ltd., Nyaungghla, Upper Burma, India.		'27
Hunter, Kelvin H., Chem., U. S. Smelt., Refin. & Min. Co.....	Midvale, Utah.	'26

Hunter, Matthew A., Prof. of Electrochemistry, Rensselaer Polytechnic Institute.	Troy, N. Y.	'20
Huntley, Louis G., Cons. Geol. Engr., Huntley & Huntley.	Frick Bldg., Pittsburgh, Pa.	'14
Huntoon, Louis D., Cons. Min. Engr.	15 Park Row, New York, N. Y.	'97
Huntzinger, C. L.	Room 2600, 15 Park Row, New York, N. Y.	'23
Hurd, Ralph, Min. Engr., Mgr., Ossian Gold Min. Co.	Box 45, Swastika, Ont., Canada.	'14
Hurd, Walter E.	200 Chestnut Ave., Narberth, Pa.	'12
Hurlburt, Alfred, A. J. Drexel & Co.	16th & Walnut Sts., Philadelphia, Pa.	'21
Hurlburt, Charles M.	Address Wanted.	'2
Hurley, A. L., Pres. & Gen'l Mgr., New Quincy Min. Co.,	705 Continental Bank Bldg., Salt Lake City, Utah.	'27
†Hurley, Harold Francis	Apt. 66, San Luis Potosi, S.L.P., Mexico.	'20
†Hurley, James J., Cerro de Pasco Copper Corp.	44 Wall St., New York, N. Y.	'27
Hursh, Robert, Mgr., Pigment Div., The New Jersey Zinc Sales Co., Inc.,	160 Front St., New York, N. Y.	'14
Hurst, M. Ewart, Asst. Geol., Ontario Dept. of Mines, Parliament Bldgs.,	Toronto, Ont., Canada.	'27
†Hurt, Everett P.	235 E. Holly St., Pasadena, Cal.	'23
Hurter, Charles S., Explosives Engr., Tech. Rep., E. I. duPont de Nemours & Co.,	Room 5104, duPont Bldg., Wilmington, Del.	'23
Husband, Herbert B., Gen'l Mgr., Fuel Mines, The Chesapeake & Ohio Ry. Co.,	Richmond, Va.	'22
Huseman, W. G., Min. Engr.	Wardner, Idaho.	'25
Hussey, Charles, Mine Operator	504 Empire State Bldg., Spokane, Wash.	'21
Huston, Charles L., Steel Mfr., V.P., Lukens Steel Co.	Coatesville, Pa.	'07
Huston, Harry Lee, Min. Engr., Asst. Mgr., Seven Troughs Gold Mines Co. of Nevada,	3100 College Ave., Berkeley, Cal.	'03
†Huston, J. Stewart, Sec. & Plant Met., Lukens Steel Co.	Coatesville, Pa.	'22
Huston, Milton B., V.P., Charge of Operations, Tonopah Min. Co. of Nevada,	572 Bullitt Bldg., Philadelphia, Pa.	'21
Hutcheson, James, V.P. & Gen'l Mgr., Rio Bravo Oil Co.,	511 Commercial Bank Bldg., Houston, Tex.	'27
Hutchings, Charles Edward, Mgr., Anglo-Greek Magnesite Co., Ltd.,	Yerakini, Polygyros, Macedonia, Greece.	'28
Hutchins, John Power, Cons. Min. Engr., Russian Min. Corp.,	5 Place Vendome, Paris, France.	'06
Hutchins, R. G., Banker	610 Park Ave., New York, N. Y.	'00
Hutchinson, Edward C., Pres., Kennedy Mining & Milling Co.,	Room 302, Clunie Bldg., 519 California St., San Francisco, Cal.	'12
Hutchinson, Frank, Cons. Engr.	307 First National Bank Bldg., Duluth, Minn.	'20
Hutchinson, George Hunt, Chief Engr., Davison Coke & Iron Co.,	2119 Oliver Bldg., Pittsburgh, Pa.	'23
Hutchinson, George W., Cons. Min. Engr.	Greensburg, Pa.	'24
Hutchinson, W. Spencer, Min. Engr., Prof. of Min., Mass. Inst. of Tech.	Cambridge, Mass.	'95
†Hutchinson, W. Spencer, Jr., Student, Mass. Inst. of Tech.	530 Beacon St., Boston, Mass.	'29
Hutchison, L. L.	910 Daniel Bldg., Tulsa, Okla.	'17
Hutchison, W., Min. Engr., Chief Engr., Hillcrest Collieries, Ltd.,	Hillcrest Mines, Alta., Canada.	'15
Huttle, Gustave E., Engr., H. C. Frick Coke Co.	Scottsdale, Pa.	'15
†Hutton, A. Krehan, Met., Blaw-Knox Co.	Blawnox, Pa.	'24
Hutton, Gerald H., Gen'l Mgr., Anglo-Oriental (Malaya), Ltd.	Box 138, Ipoh, F.M.S.	'20
Hutton, Meritt, Chief Engr., Colorado & Utah Coal Co.	1203 First National Bank Bldg., Denver, Colo.	'29
Hybinette, Victor, Met. Engr.	City Club, Jackson, Mich.	'01
†Hyde, Arthur Dwight	2120 Emerson Ave. S., Minneapolis, Minn.	'25
Hyde, James M., Mine Operator	1954 Argyle Ave., Hollywood, Cal.	'07
Hyde, R. W., Met. Engr., Dwight & Lloyd Sintering Co.	75 West St., New York, N. Y.	'13
Hymer, H. G., Hanna Ore Min. Co.	Hibbing, Minn.	'20
Hynes, Dibrell Pryor, Min. Engr.	1549 Railway Exchange, Chicago, Ill.	'15
Ibbett, Arthur W., Cons. Engr.,	c/o Jerome B. Sullivan & Co., 42 Broadway, New York, N. Y.	'18
Ickes, E. L., Geol., Gulf Oil Corp.	1221 Subway Terminal Bldg., Los Angeles, Cal.	'17
Iddings, Arthur, Asst. Mgr., International Pet. Co., Ltd.	Negritos, Talara, Peru.	'18
Ide, Kenroku, Prof. of Min., Kyoto Imperial Univ.	Kyoto, Japan.	'82
Ihseng, Axel O., Cons. Min. Engr.	151 E. 33rd St., New York, N. Y.	'14
Iioka, Masashige, c/o Mousseline	Boshoku Kabushiki Kaisha, Nakatsuhonmachi, Higashi-Yodogawaku, Osaka, Japan.	'03
Ikebe, Tatuo, Min. Engr., Keelung Coal Min. Co., Ltd.	Keelung, Formosa, Japan.	'28
Ikedai, Kamesaburo, Chief Engr., Mitsubishi Kogyo Kaisha, Ltd.	Marunouchi, Tokyo, Japan.	'26
Ikedai, Kenzo, Prof. of Met., Metal Engrg. Dept., Imperial Univ. of Tohoku	Sendai, Japan.	'18



Iki, Tsunenaka, Prof., Min. Dept., Engrg. Faculty, Tokyo Imperial Univ....Tokyo, Japan.	'21
Illinski, Alexis X.....Room 1226, 201 Varick St., New York, N. Y.	'20
Isley, Ralph.....Instructed to hold everything.	'25
Imholz, Harry William.....Apt. 8, 898 Cypress, Abilene, Tex.	'25
†Immonen, L. G., Nevada Cons. Copper Co.....McGill, Nev.	'28
Ince, Charles R., Lecturer in Min., School of Mines, Columbia Univ.....New York, N. Y.	'26
Inch, Joseph C., Min. Engr., Mgr., Cia. Minera de Tocopilla, Casilla 2, Tocopilla, Chile.	'15
Indo, Zenji, Min. Engr.....1355 Sangawa-Shinjiku, Chiba-Shi, Chiba-Ken, Japan.	'23
Ingalls, Walter R., Cons. Engr.....33 Rector St., New York, N. Y.	'91
Ingersoll, Guy E., Asst. Prof. of Min. & Met., Washington State College, School of Mines, Pullman, Wash.	'18
Ingham, W. I.....822 W. 13th St., Golden, Colo.	'24
Ingle, David, Pres., Ayshire Coal Co.....Oakland City, Ind.	'28
Inglis, William Wallace, Pres., Glen Alden Coal Co.....310 Jefferson Ave., Scranton, Pa.	'16
Innes, Murray, Min. Engr.....1344 7th St., San Diego, Cal.	'95
Inouye, Junzo, Met. Engr., Mitsubishi Iron Works, Kenjiho, Koshu, Kokaido, Chosen (Korea).	'16
Inouye, Tadashiro.....28 Minami-cho, Takanawa, Shiba-ku, Tokyo, Japan.	'12
Inslee, J. A., Easley & Inslee.....La Paz, Bolivia.	'25
Ionescu, Alexander A., Pet. Geol., Romanian Geological Institute...Bucharest, Romania.	'28
Ionides, S. A.....303 Continental Oil Bldg., Denver, Colo.	'06
Iredell, Frank W.....Room 2136, 233 Broadway, New York, N. Y.	'09
Ireland, R. Livingston, Jr., Gen'l Mgr., Bituminous Mines, M. A. Hanna Co., Leader Bldg., Cleveland, Ohio.	'24
Irvin, Donald F., Oliver United Filters, Inc.....33 W. 42nd St., New York, N. Y.	'20
Irving, Donald Riek, Ceramic Engr., Empire China Co.....Burbank, Cal.	'26
†Irwin, Arthur L., Testing Engr., Consolidated Min. & Smelt. Co. Chapman Camp., B.C., Canada.	'19
Irwin, David D., Min. Engr., Gen'l Mgr., Roan Antelope Copper Mines, Ltd., Luanshya, N. Rhodesia, Africa.	'09
Irwin, Wallace W.....Box 1405, Midland, Tex.	'29
Isakson, Carl O., Agent, Foreign Dept., H. L. Doherty & Co., 60 Wall St., New York, N. Y.	'28
Isbell, W. T., Research Met., St. Joseph Lead Co.....Bonne Terre, Mo.	'27
Ishikawa, Ichiro.....357 Nishigahara Takinogawa, Tokyo, Japan.	'16
Ishikawa, Tomekichi, Min. Engr., Fuel & Met. Investigation Dept., Shokusanakyoku, Roryoshin, Keijo-Fugai, Chosen (Korea).	'16
Ishikawa, Toshisada, Chief Engr., Nippon Aluminum Co.....Ural, Osaka, Japan.	'27
Isom, Edward W., V.P., Sinclair Refin. Co.....45 Nassau St., New York, N. Y.	'26
†Itami, Eiichiro, The Kobe Steel Wks., Ltd.....Wakinohama, Kobe, Japan.	'29
Ito, Ichiro, Mgr., Mitsubishi Min. Co., Ltd., Mitsubishi Osaka Seirenjo, Shinkawasaki-cho, Kitaku, Osaka, Japan.	'17
Ito, Masaki.....Yamane, Sumino-Mura, Nii-Gun, Yehime-Ken, Japan.	'21
Ives, Lee E., Sales Mgr., Clement K. Quinn & Co., 1050 Union Trust Bldg., Cleveland, Ohio.	'21
Ivy, John S., Chief Geol., The Palmer Corp. of Louisiana, 1100 City Bank Bldg., Shreveport, La.	'28
Ivy, William R., Seismograph Operator, Shell Co. of California, Higgins Bldg., Los Angeles, Cal.	'25
Iwai, Kyosuke, Gen'l Mgr., Komatsu Seisakusho, Komatsu Machi, Nomigun, Ishikawaken, Japan.	'17
Jablonski, E., Geol., Vacuum Oil Co.....San Antonio, Tex.	'27
Jaccard, Frederick C., Mech. Supt., Anaconda Copper Min. Co., 516 Hennessy Bldg., Butte, Mont.	'21
Jackling, Daniel C., Met. Engr.....c/o C. V. Jenkins, 25 Broad St., New York, N. Y.	'00
†Jackman, Edwin T., Dist. Mgr., Firth-Sterling Steel Co., 710 W. Lake St., Chicago, Ill.	'26
Jackman, Herbert E., Min. Engr., Pres. Syndicate Oil Corp., 49 East Ave., Rochester, N. Y.	'09
Jackson, Byron Nicholson.....239 S. Ardmore Ave., Los Angeles, Cal.	'23
Jackson, Charles F., Min. Division, U. S. Bureau of Mines..Winder Bldg., Washington, D. C.	'20
Jackson, Frederick H., Min. & Met. Engr.....67 York St., Sydney, N.S.W., Australia.	'08
Jackson, G. T., Cons. Engr., Chichagoff Mines, Ltd.....800 Leary Bldg., Seattle, Wash.	'13
Jackson, George R., Gen'l Supt., Min. Dept., The Cleveland-Cliffs Iron Co., Ishpeming, Mich.	'08
Jackson, Philbrick Wylie, Supt., Blast Furnace, Columbia Steel Corp.....Provo, Utah.	'26
†Jackson, Robert A., Asst. Engr., The Colorado Fuel & Iron Co.....Walsen, Colo.	'21
†Jacob, Walter Phelps, Asst. to V.P., W. R. Grace & Co., 7 Hanover Sq., New York, N. Y.	'26
Jacobs, John Elmer, Student, Carnegie Inst. of Tech.....Pittsburgh, Pa.	'28

# 76 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Jacobs, M. L., Mgr. of Quarries, Bethlehem Mines Corp.	Bethlehem, Pa.	'17
†Jacobsen, L. K., Met. Engr., Mount Isa Mines, Ltd.	Mount Isa, Queensland, Australia.	'23
Jacobson, Simon, Supt., Tooele Lead Plant, International Smelt. Co.	Tooele, Utah.	'20
Jacobus, David S., Advisory Engr., Babcock & Wilcox Co.,	85 Liberty St., New York, N. Y.	'83
Jahn, Gustave A., Min. Engr.	176 Hicks St., Brooklyn, N. Y.	'15
Jahn, William F., Cia. Minera de Penoles, S. A.	Balsas, Gro., Mexico.	'15
Jakosky, J. J., Cons. Engr., The Radiore Co., Inc.,	9035 Venice Blvd., Los Angeles, Cal.	'28
James, Alfred, Cons. Min. Engr.	28 Victoria St., London, S.W.1, England.	'94
James, Arthur C., V.P., Phelps Dodge Corp.	99 John St., New York, N. Y.	'02
James, Frederic W., Chief Engr. & V.P., N. P. Nelson Iron Wks., Inc.	Passaic, N. J.	'17
†James, R. H., V.P., State Line Generating Co.	72 W. Adams St., Chicago, Ill.	'27
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James, William Ewart, Min. Engr., Mgr., Southern Smokeless Coal Co.,	2010 Washington St., Charleston, W. Va.	'11
Jameson, A. H., Mgr., Castings Sales, Malleable Iron Fittings Co.	Branford, Conn.	'02
Jameson, Alfred Storm, Chief Met., International Harvester Co., West Pulman Wks.,	1015 W. 120th St., Chicago, Ill.	'29
Jamieson, Daniel, Jr., Min. Engr., Shallmar Min. Corp.,	705 U. S. Bank Bldg., Johnstown, Pa.	'26
Janeway, J. H., Asst. to Pres., The New Jersey Zinc Co.	160 Front St., New York, N. Y.	'86
Janin, Charles, Min. Engr.	716 Kohl Bldg., San Francisco, Cal.	'12
Janney, John, Gen'l Mgr., Pioche Mines Co.	Pioche, Nev.	'22
Jansen, P. J., Min. Engr., Supt., Redjang Lebong & Simau Min. Cos.,	Wilhelminalaan 6, Wassenaar, Netherlands.	'13
Janson, Henning F., Min. Engr., Canadian Johns-Manville Co., Ltd.,	Asbestos, Que., Canada.	'29
Jardine, F. M., Asst. Mill Supt., Nevada Consolidated Copper Co.	McGill, Nev.	'17
Jarman, Arthur, Oliver United Filters Co. of San Francisco.	San Francisco, Cal.	'02
Jarvis, Ernest G., Pres. & Gen'l Mgr., Niagara Falls Smelt. & Refin. Corp.,	2208 Elmwood Ave., Buffalo, N. Y.	'28
Jarvis, Royal P., Geol. & Min. Engr.	Mineral de Dos Estrellas, Mich., Mexico.	'00
Jarvis, William L., Pet. Engrg. Work., Humble Oil & Refin. Co.	Rosston, Ark.	'23
Jarvis, William R., Dist. Mgr., Sullivan Machinery Co.,	518 Farmers Bank Bldg., Pittsburgh, Pa.	'16
Jasberg, O. J., Designing Engr., Sullivan Min. Co.	Box 685, Kellogg, Idaho.	'19
Jasper, M. W., Min. Engr., The Radiore Co. of Canada,	307 B. C. Min. Bldg., Vancouver, B. C., Canada.	'25
Jeckell, Charles Patterson, Shift Boss, Compagnie Aramayo de Mines en Bolivie,	Telemayu, Atocha, Bolivia.	'28
Jeffery, Joseph A., Pres., Champion Porcelain Co.,	Butler Ave. & Grand Trunk R. R., Detroit, Mich.	'26
Jeffrey, Robert H., Min. Engr., Harnham Croft.	Salisbury, Wilts, England.	'96
Jeffreys, Richard R. V., Civ. & Min. Engr., c/o Selection Trust, Ltd., Roan Antelope Copper Mines, Ltd., via N'dola, N. Rhodesia, Africa.		'24
Jeffries, Zay, James Douglas Medallist, A. I. M. E., 1927; Consultant, Aluminum Co. of America; Incandescent Lamp Dept. of General Electric Co., & National Tube Co.,	2210 Harvard Ave., Cleveland, Ohio.	'13
Jenison, H. A. C., Cons. Engr., Guaranty Co. of N. Y.	140 Broadway, New York, N. Y.	'23
Jenkin, Anthony, Assoc. Prof. of Min. Engrg., Case School of Applied Science,	Cleveland, Ohio.	'20
Jenkins, Albert C., Engr., Jenkins Engrg. Co.	518 Virginia St., Seattle, Wash.	'20
Jenkins, C. V., Nevada Cons. Copper Co.	Room 811, 25 Broad St., New York, N. Y.	'16
Jenkins, Charles H., Anglo Chilean Cons. Nitrate Corp.	Box 541, Saranac Lake, N. Y.	'29
Jenkins, Francis.	Moscow, Idaho.	'00
Jenkins, George F., Asbestos Corp., Ltd.	Thetford Mines, Que., Canada.	'24
Jenkins, J. H., Geol., Tidal Oil Co.	2005 W. T. Waggoner Bldg., Fort Worth, Tex.	'17
Jenkins, L. R., Cia. Real Del Monte y Pachuca.	Pachuca, Hgo., Mexico.	'16
Jenkins, Olaf P., Geol.	Stanford University, Cal.	'17
Jenkins, William J., Pres. & Gen'l Mgr., Consolidated Coal Co. of St. Louis,	Suite 2069, Railway Exchange Bldg., St. Louis, Mo.	'14
Jenks, Arthur W.	540 S. 14th St., San Jose, Cal.	'87
Jenks, Norman L., Min. Engr., San Antonio Min. & Smelt. Co., Ltd.,	Apt. 156, Medellin, Colombia.	'09
Jenks, T. H., Cons. Min. Engr. & Geol.	314 W. Court St., Paris, Ill.	'02
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†Jennings, Edward B., Min. Engr.	1333 Alvarado Terrace, Los Angeles, Cal.	'18
Jennings, John M., Supt., Bishop Corp.	Box 356, Bakersfield, Cal.	'25

For explanation of symbols, see page 5.

Jennings, R. C., Geol. Dept., The Anglo Persian Oil Co., Ltd., Britannic House, Finsbury Circus, London, E.C.2, England.	'21
Jennings, Robert E., 2nd, Marlon S. Emery & Co.....	'16
Jennison, H. C., Asst. Tech. Supt., The American Brass Co.....	'18
Jennison, W. F., Min. Engr.....	'03
Jensen, Joseph.....	'15
†Jephson, Allen C., Asst. Met., American Smelt. & Refin. Co.....	'29
Jeppson, George N., Sec. & Works Mgr., Norton Co.....	'01
Jernakoff, Michael A., Chem., Standard Oil Dev. Co.....	'29
Jess, John A., Min. Engr., Royal Mineral Assn.....	'17
Jessen, Henry Christian, U. S. Gypsum Co., Mystic Wharves.....	'28
Jessup, Albert B., Min. Engr., V.P. & Gen'l Mgr., Jeddo-Highland Coal Co.; Jeddo Tunnel Co., Jeddo, Pa.	'06
Jessup, Douglas W., Asst. Gen'l Mgr., Rhodesia Broken Hill Dev. Co., Broken Hill, N. Rhodesia, S. Africa.	'24
Jette, Archille Norman, Student, Metallurgy, M. I. T.....	'29
Jewell, Edward S., Asst. Min. Engr., Verde Central Mines, Inc....	'28
Jewell, William E., Supt., Merchant Mill, Inland Steel Co.....	'19
Jewett, Frank G., Sec., Guaranteed Mortgage Co....	'03
†Jewett, Freeland.....	'11
Jillson, Willard Rouse, Dir. & State Geol., Kentucky Geol. Survey, Old State Capitol, Frankfort, Ky.	'20
Jimenez Jaramillo, Jesús, Cons. Min. Engr. & Geol.....	'23
Job, Robert, V.P., Milton Hersey Co., Ltd....	'18
†Johann, Henry A., Sales Agent, Machinery.....	'20
Johanson, Nels E.....	'27
Johns, Alfred L., Min. Engr.....	'15
Johns, J. Harry, Cons. Min. Engr., Villa Hortensia, Piani Borghetto, Bordighera, Italy.	'04
Johns, John W.....	'20
Johnson, Albion, Casting Dept., American Brass Co.....	'27
Johnson, Alfred E., The A. E. Johnson Machine Co.....	'04
†Johnson, Alva M., Geol., Associated Oil Co.....	'26
†Johnson, Arthur I., Min. Engr., Keystone Cons. Mines.....	'20
Johnson, Charles H., Jr., Student, Mass. Inst. of Tech.....	'25
Johnson, Clifton W., Chem., Fundición de Morelos, Apt. 66, San Luis Potosi, S. L. P., Mex.	'27
Johnson, Daniel Stewart, Cons. Min. Engr., Pres., Goldfield Blue Bell Mine Co., Box 548, Tonopah, Nev.	'20
Johnson, Elias M., Gen'l Mgr., Johnson Steel Wks.....	'02
Johnson, Ernest C., Jr., Inspiration Consolidated Copper Co....	'24
Johnson, F. A., Anchor Oil & Gas Co.....	'15
Johnson, G. E., International Lead Refin. Co.....	'17
Johnson, Guy J., Min. Engr., Cerro de Pasco Copper Corp.....	'19
†Johnson, Guy R., Engr., Bureau of Accidents, Public Service Commission of Pennsylvania, Harrisburg, Pa.	'15
Johnson, H. Norton, Geol., General Pet. Corp.....	'19
Johnson, Harry Roland, Cons. Geol....	'21
Johnson, Herbert, Cia. Minera Asarco, S. A.....	'26
Johnson, Herbert C., Min. Engr., Patino Mine, & Enterprises Cons., Llallagua, Bolivia, S. A., Siglo XX.	'26
†Johnson, Hjalmar W., Blast Furnace Dept., Illinois Steel Co.....	'22
Johnson, J. Fred, Cons. Engr. & Contractor.....	'14
†Johnson, J. Harlan, Assoc. Prof. of Geol., Colorado School of Mines.....	'16
Johnson, Jesse C., Cons. Min. Engr.....	'22
Johnson, Joseph E.....	'28
Johnson, Kenneth W., Lab. Asst., Physical Lab., Newburgh Steel Wks., American Steel & Wire Co., Cleveland, Ohio.	'27
Johnson, L. G., Federal Min. & Smelt. Co.....	'17
Johnson, Lincoln.....	'21
Johnson, Meredith Esrey, Asst. State Geol. of New Jersey, State House Annex, Trenton, N. J.	'25
Johnson, O. H., Mgr., Marcy Mill Dept., The Mine & Smelter Supply Co., 17th & Blake Sts., Denver, Colo.	'18
Johnson, Roswell H., Prof., Oil & Gas Production, Univ. of Pittsburgh....	'15
Johnson, Theodore L.....	'24
Johnson, Walter L.....	'04
Johnstin, Harry Grant.....	'26
Johnson, Albert W.....	'05
Johnston, Archibald, V.P., Bethlehem Steel Co.....	'02
†Johnston, Byron A. C., Asst. Geol., Cerro de Pasco Copper Corp.....	'22
Johnston, Charles W., Min. Engr.....	'13
Johnston, Fred. L., Cons. Engr.....	'05



Johnston, Frederick Atkins, Supt., Assay and Metallurgical Division, S. S. White Dental Mfg. Co., Prince Bay, Richmond Co., N. Y.	'14
Johnston, Frederick Lucien, Mech. Engr., Union Oil Co. of California, Room 1115, Union Oil Bldg., Los Angeles, Cal.	'17
Johnston, Irving H.	'16
Johnston, John, Dir. of Research, U. S. Steel Corp., Research Lab.	'28
†Johnston, Leslie M., V.P., A. M. Byers Co.	'29
Johnston, R. Barker, Mine Mgr. & Tech. Dir., Tinoca & Mont' Alto Mines, Ltd., Estrada de Sacavem 400, Lisbon, Portugal.	'98
†Johnston, Roderick L., Met. Engr., Aluminum Co. of America; The U. S. Aluminum Co., Garwood, N. J.	'12
Johnston, Verne D., Min. Engr., Oglebay Norton & Co., 1208 Hanna Bldg., Cleveland, Ohio.	'20
Johnston, W. R., V.P. & Gen'l Mgr., The Metals Prod. Co., Citizens National Bank Bldg., Boulder, Colo.	'20
Johnston, William Drumm, Jr.	'25
Jones, Archibald, Met.	'18
Jones, Archibald, Jr., Student, Carnegie Inst. of Tech.	'28
†Jones, Augustus, Instr. in Electrochemistry, Dept. of Electrical Engrg., Rensselaer Polytechnic Institute, Troy, N. Y.	'24
Jones, C. Colcock, Cons. Min. Engr., 1014 Quinby Bldg., 650 S. Grand Ave., Los Angeles, Cal.	'00
Jones, Charles H., Met. Engr.	'04
Jones, Charles N., Chem., Inland Collieries Co.	'26
Jones, D. Carleton	'27
Jones, David H., Min. Engr.	'25
Jones, E. E., Winding Gulf Collieries, Inc.	'21
Jones, E. Horton, Gen'l Supt., Southwestern Cons. Graphite Co.	'15
Jones, Edward B., Min. Engr., Geol.	'02
Jones, Edward Eynon, Mine Supt., Utah Fuel Co.	'27
Jones, Edward L., Jr., Geol., Roxana Pet. Corp.	'20
Jones, Edward Oswald, Met. Dept., Manchester Univ.	'21
Jones, Edward S., Coal Operator	'04
Jones, Evan Rosser	'02
Jones, Fayette A., Cons. Min. Engr.	'98
Jones, Fred, Supt., Portland Mine, Portland Gold Mine Co.	'19
†Jones, G. H., Pres., Hillside Fluorspar Mines	'20
†Jones, I. W., Geol., Bureau of Mines, Parliament Bldg., Quebec City, Que., Canada.	'25
Jones, J. C., Prof. of Geol., University of Nevada	'16
Jones, J. D., V.P. & Gen'l Mgr., Algoma Steel Corp., Ltd., Sault Ste. Marie, Ont., Canada.	'17
Jones, James Ellwood, Min. Engr.	'15
Jones, John Donald, Cons. Min. Engr., 310-2nd National Bank Bldg., Wilkes-Barre, Pa.	'19
Jones, John E., Min. Engr., Old Ben Coal Corp.	'19
Jones, LaMar	'28
Jones, LeRoy, Quarry Engr., U. S. Gypsum Co.	'28
Jones, R. H. B.	'27
†Jones, Ray S.	'28
Jones, Raymond L., Supt., Empire Zinc Co.	'25
Jones, Robert W., Engr.	'21
Jones, Roy William, Metallographist, Bethlehem Steel Co.	'26
Jones, T. H. Evans, Student, Colorado School of Mines	'29
Jones, T. Richards, U. S. Metals Refin. Co.	'28
Jones, Thomas R., Cons. Min. Engr.	'14
†Jones, Verner E., Dept. of Geol., Cornell Univ.	'29
Jones, Walter B., State Geol.	'28
Jones, Wendell M., Sales Engr., Pet. Equipment Co., 2800 S. Alameda St., Los Angeles, Cal.	'24
Jones, William, Cons. Min. Engr. & Met., Northbrook House, 2 Northbrook Rd., Lee, London, S.E.13, England.	'05
Jones, William Larimer, Jr., Dir., Jones & Laughlin Steel Corp., 3rd Ave. & Ross St., Pittsburgh, Pa.	'27
Jones, William Strickler, Min. Engr.	'21
Jones, Willmot C., Anthracite Coal Min., Chief Engr., Hazle Brook Coal Co.	'22
Jopling, James E., Min. Engr.	'84
†Jopling, Reginald F., Cons. Min. Engr., V.P., Pigott Steel Co., 632 Frankfort Ave., Cleveland, Ohio.	'89
Joralemon, Ira B., Min. Engr. & Geol.	'12
†Jordan, DeVaut, Min. Engr., Mont. State School of Mines	'27
Jordan, Fred A.	'05
Jordan, John Walter	'26
Jordan, Walter Lyle, Chemical Engr.	'21
Jorgensen, E. L., Cons. Met. Engr., Mgr., Irvington Smelt. & Refin. Wks.	'17
Jorgensen, F. F., Consolidation Coal Co.	'12

Jorgensen, Millard A., Met. Engr., Bunker Hill & Sullivan Min. & Concentrat. Co., Kellogg, Idaho.	'27
Joseph, Thomas L., J. E. Johnson, Jr., Award, A.I.M.E., 1927; Supervising Engr., North Central Experiment Sta., U. S. Bureau of Mines, Univ. Campus, Minneapolis, Minn.	'24
Josephs, Irving S., Min. Engr.....165 Broadway, New York, N. Y.	'09
†Josey, R. A., Oil Producer, Josey Oil Co.....606-613 Oklahoma Natural Bldg., Tulsa, Okla.	'18
Joslin, Garnett A., Min. Engr.....424 Rives-Strong Bldg., Los Angeles, Cal.	'17
†Jourdin, W. W., Pres., W. W. Jourdin & Co., Inc.....Flatiron Bldg., New York, N. Y.	'17
Jowett, J. H., V.P., Ingersoll-Rand Co.....11 Broadway, New York, N. Y.	'16
Joyce, Edwin, Assoc. Met., U. S. Naval Aircraft Factory.....Philadelphia, Pa.	'18
Judd, Douglass R., Sales Engr., Hardinge Co., Inc., Continental Bank Bldg., Salt Lake City, Utah.	'26
Judson, Sidney A., Chief Geol., Humphreys Corp.....1701 Esperson Bldg., Houston, Tex.	'24
Judson, W. R., Dist. Sales Mgr., Allis-Chalmers Mfg. Co., Edificio Ariztia 10° Piso, Santiago, Chile.	'18
Judson, Wilber.....75 E. 45th St., New York, N. Y.	'13
Julian, Estey A., Gen'l Mgr., Goldfield Cons. Mines Expl. Co., 421 Crocker First National Bank Bldg., San Francisco, Cal.	'15
Julihn, C. E., Chief Engr., Common Metals Div., U. S. Bureau of Mines..Washington, D. C.	'18
Jurin, Vladimir N.....122 S. Benton Way, Los Angeles, Cal.	'24
Just, Evan, Cons. Geol.....Suite 3300, Pure Oil Bldg., Chicago, Ill.	'23
Kadeli, Abraham.....1653 E. 2nd St., Brooklyn, N. Y.	'25
Kaeding, C. D., Cons. Engr., Sterling Tower Bldg., Bay & Richmond Sts., Toronto, Ont., Canada.	'04
Kaercher, Edward E., Gen'l Supt., Philadelphia & Reading Coal & Iron Co., 200 Mahantongo St., Pottsville, Pa.	'15
†Kahn, Noah A., Met., U. S. Navy Yard.....Brooklyn, N. Y.	'28
†Kahn, Walter B., Lazard Freres.....120 Broadway, New York, N. Y.	'23
Kalb, J. L., Lago Pet. Corp.....Apt. 172, Maracaibo, Venezuela.	'20
Kameros, Samuel, Min. Engr.....New York, N. Y.	'25
Kamimura, Ichiro, Min. Engr., Mitsubishi Yoshioka Mine.....Okayamaken, Japan.	'14
Kanda, Reiji, Cons. Min. Engr.....1171 Seta, Tamagawa, Ebura-Gun, Tokyo-Fu, Japan.	'93
Kaneko, Kiosuke, The Mitsubishi Seitetsu-Kaisha, Ltd., Kenjiho Iron & Steel Wks., Kenjiho, Chosen (Korea).	'20
Kang, S. C.....116, Sin Chang, Pu Tung, Shanghai, China.	'20
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†Kanter, Jerome J., Testing Engr., Crane Co.....Chicago, Ill.	'29
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Karl, Fred W.....c/o Gypsy Oil Co., Tulsa, Okla.	'28
†Karla, G., E. R. Little Co., Inc.....1920 Ford Bldg., Detroit, Mich.	'24
Karp, Jacob R., Str. Steel Draftsman, Board of Transportation, 49 Lafayette St., New York, N. Y.	'24
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Kashin, Gleb L.....117 Mill Ave., Kellogg, Idaho.	'23
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Kasson, Burt Z.....104 Kingsboro Ave., Gloversville, N. Y.	'02
Katayama, Ryohei, Nippon Min. Co.....Tokyo, Japan.	'20
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Katsura, Benzo, Prof. of Met., Imperial Tokyo Univ.....Tokyo, Japan.	'09
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Kawasaki, Shigetaro, Chief Geol., Geological Survey of Chosen, Government General of Chosen, Keijo (Korea).	'18

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Keays, Reginald H., Chief Engr., Ulm & Co., 25a Rue Philhellene, Athens, Greece.	'25
Kedzie, G. Edward, Cons. Min. Engr. & Geol., Brownsville, Tex.	'88
Kee, H. A., 303 Russell Hill Rd., Toronto, Ont., Canada.	'14
Keedy, Dyke V., Cons. & Met. Engr., Melrose Highlands, Mass.	'10
†Keefe, Thomas G., Chem., Permutit Co., 440 4th Ave., New York, N. Y.	'27
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Keeler, Clifton M., Geol., Indian Territory Illuminating Oil Co., Commerce Exchange Bldg., Oklahoma City, Okla.	'21
†Keeler, William W., Geol., Minnehoma Oil & Gas Co., 701 Atlas Life Bldg., Tulsa, Okla.	'20
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Keffer, Frederic, Cons. Min. Engr., 1103 Paulsen Bldg., Spokane, Wash.	'06
Kegler, Vern L., Supt. of Mines, Ducktown Chem. & Iron Co., Isabella, Tenn.	'23
Kehew, F. D., Smelter Supt., Messina (Transvaal) Dev. Co., Messina, Transvaal, S. Africa.	'23
Keiller, Alexander G., Supt., Panama Corp., Ltd., Santiago, Veraguas, Republic of Panama.	'02
Keiser, H. D., Asst. Editor, <i>Engrg. &amp; Min. Journal</i> , McGraw-Hill Publishing Co., Inc., 10th Ave. & 36th St., New York, N. Y.	'26
Keith, Charles Napier, Supt., The Balaghat Gold Mines, Ltd., Coromandel P.O., Mysore Province, S. India.	'21
†Kelleher, Cornelius, 215 Loring Ave., Pelham Heights, N. Y.	'20
Keller, Arthur H., Min. Engr., Santa Rosa de Copan, Honduras, C.A., Via New Orleans.	'83
Keller, Edward, Met. Chem., 2002 Argyle Ave., Hollywood, Cal.	'95
Kelley, Arthur L., Cia. de Inversiones Del Oro, S. A., Apt. 11, Sombretete, Zac., Mexico.	'08
Kelley, Augustine F., Treas. & Gen'l Mgr., Humphreys Coal & Coke Co., Greensburg, Pa.	'27
Kelley, Cornelius F., Pres., Anaconda Copper Min. Co., 25 Broadway, New York, N. Y.	'05
Kelley, Floyd C., Met., Research Laboratory, General Electric Co., Schenectady, N. Y.	'29
Kelley, Frank A., Gen'l Supt., Pickands-Mather & Co., Ironton, Minn.	'21
Kelley, Laurence E., Div. Engr., Pocahontas New River Div., The Consolidation Coal Co., Coalwood, W. Va.	'24
Kellogg, Chester A., Met., Keystone Steel & Wire Co., Peoria, Ill.	'23
Kellogg, Donald Lewis, Cons. Engr., Suite 3201, 10 E. 40th St., New York, N. Y.	'29
Kellogg, Lee O., Min Engr., 586 Foothill Rd., Stanford University, Cal.	'13
†Kelly, John Eoghan, Cons. Engr., 17 Battery Pl., New York, N. Y.	'21
Kelly, Leon William, Nichols, Fla.	'28
Kelly, Oliver G., Student, School of Mines, Oregon State College, Corvallis, Ore.	'29
Kelly, Sherwin F., Geol. & Geophysicist, Asst. Mgr., Schlumberger Electrical Prospecting Methods, 25 Broadway, New York, N. Y.	'19
Kelly, T. J., Colliery Engr., Coal Brook Colliery, Hudson Coal Co., Carbondale, Pa.	'27
Kelly, William, 817 W. Brown St., Iron Mountain, Mich.	'90
Kelsey, W. M., Supt., Palmerton Plants, New Jersey Zinc Co. of Pa., Palmerton, Pa.	'16
Kemery, Philo, Chem. & Met., Pittsburgh Engrg., Fdry. & Constr. Co., 509 Peoples Bank Bldg., Pittsburgh, Pa.	'21
Kemler, W. H., Chem. & Min. Engr., Box 214, Johnson City, Tenn.	'99
Kemp, James T., Asst. Met., The American Brass Co., Waterbury, Conn.	'14
Kemp, L. W., Met., Asst. Gen'l Mgr., Chile Exploration Co., Chuquicamata, via Antofagasta, Chile.	'14
Kempe, Johan, Disponent, Bergsingenior, Idkerbergets Grufaktiebolag & Grufaktiebolaget Dalarne, Idkerberget, Sweden.	'22
†Kendall, Francis Woodley, Flotation Engr., Cia. Minera Backus y Johnston del Peru, Casapalca, Peru.	'28
Kendall, Messmore, Lawyer, 17 E. 42nd St., New York, N. Y.	'15
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For explanation of symbols, see page 5.



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Kennedy, Ezra J., Jr., Asst. to Secretary, Amer. Inst. Min. and Met. Engrs.,	2714 E. 2nd St., Duluth, Minn. '11
	29 West 39th St., New York, N. Y. '30
Kennedy, Frank Albert, Min. Engr.....	1817 Resseguie St., Boise, Idaho. '17
†Kennedy, Frederic R., Pres., Seneca Copper Min. Co.,	
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Kennedy, Harry G., Combustion Engr., Carbon Fuel Co.,	
	1207 Traction Bldg., Cincinnati, Ohio. '26
Kennedy, Jeremiah J., Cons. Engr.....	52 Broadway, New York, N. Y. '02
Kennedy, John, Min. Engr.....	New Wharf, Hobart, Tasmania. '96
Kennedy, Joseph E., Pres., Kennedy-Van Saun, Mfr. & Engrg. Corp.,	
	2 Park Ave., New York, N. Y. '11
Kennedy, Julian, Cons. Engr.....	1217 Bessemer Bldg., 6th & Duquesne Way, Pittsburgh, Pa. '79
Kennedy, L. E., Pet. Geol., Chief Geol., Douglas Oil Co.,	
	514 Atlas Life Bldg., Tulsa, Okla. '20
†Kennedy, Robert E.....	222 W. Adams St., Chicago, Ill. '24
Kennedy, Thomas F., Cons. Valuation Engr.....	314 Connell Bldg., Scranton, Pa. '25
Kennedy, Edward F., Met. Engr., Bethlehem Steel Co.....	Bethlehem, Pa. '17
Kenny, Herman C., Met., Calumet & Hecla Cons. Copper Co.....	Lake Linden, Mich. '28
Kenrick, John P., Gen'l Agent & Chief Engr., Peking Syndicate, Ltd.....	Peking, China. '16
†Kent, Frank J., Patent Lawyer.....	233 Broadway, New York, N. Y. '28
Kent, Joseph F., Min. Engr.....	Box 863, Huntington, W. Va. '02
Kent, William St. George.....	860 Riverside Dr., New York, N. Y. '72
Keough, O. E., Concentration Engr., International Smelt. Co.....	Tooele, Utah. '29
Kern, Edward F., Prof. of Non-Ferrous Met. & Electromet., School of Mines,	
	Columbia Univ., New York, N. Y. '18
Kernan, Thomas H., Pet. Geol.....	5003 Victor St., Dallas, Tex. '16
Kerns, Ralph W., Asst. Engr., Zinc Dept., American Smelt. & Refin. Co.,	
	1212 Mills Bldg., El Paso, Tex. '16
Kerr, David G.....	818 Carnegie Bldg., Pittsburgh, Pa. '03
Kerr, Guy Manning.....	Charlesgate Hotel, 535 Beacon St., Boston, Mass. '15
Kerr, John B., Cons. Pet. Geol.....	508 Balboa Bldg., San Francisco, Cal. '19
Kersey, Harold.....	Artesia, N. M. '23
Kett, Frederick F.....	Instructed to hold everything. '19
Kettenbach, O. L., Min. Engr.....	527 N. Park Ave., Tucson, Ariz. '24
†Kettner, Raymond V., Chemist, International Smelt. Co.....	Tooele, Utah. '24
Kew, William S. W., Geol., Standard Oil Co. of California,	
	Box 1390, Sta. C, Los Angeles, Cal. '20
Keyes, Charles R., Cons. Engr.....	Avalon, Oracle Rd., Route 1, Box 178, Tucson, Ariz. '99
Keyes, Harmon E., Chem. & Met. Engr.....	Box 1745, Miami, Ariz. '18
†Keyes, Wilson, Pet. Geol.....	403 San Angelo National Bank Bldg., San Angelo, Tex. '22
Kibe, Kazuye, Min. Engr.....	1596 Higashi-Nakano, Nakano-cho, Tokyo, Japan. '10
Kichline, F. O., Engr. of Tests, Lebanon Plant, Bethlehem Steel Co.....	Lebanon, Pa. '14
Kidd, R. L., Univ. of Utah, Dept. of Met. Research.....	Salt Lake City, Utah. '24
Kidder, S. J., International Nickel Co., Frood Mine.....	Sudbury, Ont., Canada. '12
Kiddle, Alfred W., Lawyer.....	115 Broadway, New York, N. Y. '21
†Kiessling, Oscar E., Mineral Economist, Bureau of Mines.....	Washington, D. C. '28
Kihlgren, T. E., Research Met., International Nickel Co.....	Bayonne, N. J. '25
†Kihlstedt, Folke H., Geophysicist, Min. Engr., Swedish-American Prospecting Corp.,	
	12th Floor, 26 Beaver St., New York, N. Y. '29
Kiil, Erling, Min. Engr., U. S. Metals Refin. Co.....	Carteret, N. J. '30
Kikkawa, Iwaki, Prof., Waseda Univ.....	Tokyo, Japan. '14
†Kilinski, Edward A., Caracas Pet. Corp.....	Apt. 518, Caracas, Venezuela. '22
Kimball, E. B., Min. Engr.....	1810 Electric Bldg., Fort Worth, Tex. '97
Kindler, Harold A., Borchert Ingersoll Co.....	2360 University Ave., St. Paul, Minn. '26
King, Austin J., Min. Engr., Thermo-Pocahontas Coal Co.....	Box 508, Huntington, W. Va. '28
King, C. B., Bodinson Mfg. Co., Inc.....	4401 San Bruno Ave., San Francisco, Cal. '20
King, C. D., Met., U. S. Steel Corp.....	71 Broadway, New York, N. Y. '28
†King, Clarence R.....	Hinkley, Cal. '19
King, Ernest W., Walker River Irrigation District.....	Yerington, Nev. '99
†King, F. E.....	c/o C. Haring, 205 Preston St., Ridgefield Park, N. J. '17
King, Kenneth V., Refinery Library, Standard Oil Co. of California.....	Richmond, Cal. '27
King, Oliver, Min. Engr.....	Rand Club, Johannesburg, Transvaal, S. Africa. '05
King, Rowland, Min. Engr.....	317 Lindelle Bldg., Spokane, Wash. '17
King, Russell W., Student, Training Course, Jeffrey Mfg. Co.....	Columbus, Ohio. '25
†King, William Edward, Student, Mass. Inst. of Tech.....	107 Queensberry St., Boston, Mass. '29
King, William Homer, Min. Engr., Whitlock Mines Corp.....	Mariposa, Cal. '28
Kingdon, Frank H., Met., Iron & Steel, Sullivan Machinery Co.....	Claremont, N. H. '20
Kingdon, George, Gen'l Mgr., United Verde Extension Min. Co.....	Jerome, Ariz. '15

[[Kingelin, George G., Field Engr., Shell Pet. Corp.....	Box 742, Healdton, Okla.	'25
†Kingsbury, Charles H., Supt., San Sebastian Mine, Central American Mines, Inc., Depto. de la Union, El Salvador, C. A.		'27
[[Kingsley, Paul S.....	345 Washburn St., Lockport, N. Y.	'29
Kingsmill, Harold, Gen'l Mgr., Cerro de Pasco Copper Corp., Casilla 2412, Lima, Peru.		'24
Kingston, Charles B., Asst. Cons. Engr., Anglo-American Corp. of South Africa, Ltd., Broken Hill, N. Rhodesia, S. Africa.		'95
[[Kinley, Frederic B., Sales Engr., Ingersoll-Rand Co. of Brazil, Rua Theophilo Ottoni 35, Rio de Janeiro, Brazil.		'27
Kinnear, James W., Jr., Asst. Open Hearth Supt., Carnegie Steel Co.....	Munhall, Pa.	'28
Kinney, Charles L., Jr., Robert W. Hunt Metallist, A. I. M. E., 1926; Dir., Physical Lab., Illinois Steel Co., South Works, 3426 E. 89th St., Chicago, Ill.		'24
Kinney, Harry D., Engr., Harvey Fisk & Sons.....	120 Broadway, New York, N. Y.	'12
Kinney, S. P., J. E. Johnson, Jr., Award, A.I.M.E., 1927; H. A. Brassert & Co., 310 S. Michigan Ave., Chicago, Ill.		'25
†Kinsey, William E., Supt., Kinsey & Mahler Co.....	400 South Adams St., Peoria, Ill.	'18
Kinter, George, Chem. Engr., Tidal Refin. Co.....	Tulsa, Okla.	'20
Kinzel, Augustus B., Met., Union Carbide & Carbon Research Lab., Long Island City, N. Y.		'26
Kinzie, Robert A., Min. Engr., Crocker First National Bank Bldg., San Francisco, Cal.		'95
†Kinzie, Robert A., Jr., Factory Representative, Santa Cruz Portland Cement Co., 2969 Lake St., San Francisco, Cal.		'29
[[Kipp, Rex, American Smelt. & Refin. Co.....	Monterrey, N. L., Mexico.	'21
Kirby, A. G., Min. & Met. Engr., Kirby Dev. Corp.....	Angels Camp, Calaveras Co., Cal.	'16
Kirby, Edmund B., Cons. Min. & Met. Engr.....	253 W. 95th St., New York, N. Y.	'84
Kirby, William K., Cons. Pet. Engr., Graver Corp.....	844 Rush St., Chicago, Ill.	'22
†Kircaldie, William I., Mgr., Engrg. Dept., The American Appraisal Co....	Milwaukee, Wis.	'19
Kirchen, John G., Mine Mgr., Tonopah Extension Min. Co.....	Tonopah, Nev.	'15
Kirk, Charles T., Cons. Geol.....	Mayo Bldg., Tulsa, Okla.	'17
Kirk, Leotis Wilber, Master Mechanic, U. S. Smelt. Co., Smelter St., Midvale, Utah.		'27
Kirk, M. D., Asst. to the Pres., The Vesta Coal Co., Jones & Laughlin Bldg., Pittsburgh, Pa.		'16
Kirkbride, George A., Mgr. of Mines, Min. Engr. & Met.....	Box 845, Prescott, Ariz.	'29
Kirkham, Virgil R. D., Geol., Idaho Bureau of Mines & Geol., Asst. Prof. of Geol., School of Mines, Univ. of Idaho, Moscow, Idaho.		'26
†Kirkpatrick, J. C., Flotation Engr., Mill Supt., Rose City Ore Co.....	Georgetown, Colo.	'27
Kirkpatrick, Robinson R.....	1275 Transportation Bldg., Chicago, Ill.	'19
Kirkpatrick, S. F., Mgr., Min. & Met. Dept., M. J. O'Brien, Ltd., Room 816, Ottawa Electric Bldg., Ottawa, Ont., Canada.		'03
[[Kirkpatrick, William S., Assayer, Consolidated Min. & Smelt. Co....	Trail, B. C., Canada.	'26
Kirtley, Luther L.....	1444 Yale Ave., Salt Lake City, Utah.	'21
Kiser, Alexander B., Elec. Engr., Pittsburgh Coal Co., Room 1022, Oliver Bldg., Pittsburgh, Pa.		'24
Kissam, William Adams, Pres. & Treas., South American Mines Co., 225 Broadway, New York, N. Y.		'25
Kissling, E. A., Exploitation Geol., Bataafsche Pet. Maatschappij, 30 Carrel van Bylandtlaan, The Hague, Netherlands.		'24
Kissock, Alan, Min. Engr., Climax Molybdenum Co.....	61 Broadway, New York, N. Y.	'19
Kithil, Karl L., Cons. & Industrial Engr., C. A. Johnson Bldg., 509 17th St., Denver, Colo.		'16
**Kithil, Karlos W., Mill Operator, American Metal Co.....	Glorieta, N. M.	'29
Kitson, Howard W., Geol., The Texas Co.....	216 Haberfelde Bldg., Bakersfield, Cal.	'09
Kittle, Charles A., Pres., Ohio Copper Co. of Utah.....	37 W. 43rd St., New York, N. Y.	'24
Kitto, William Clement, Supt., Open Hearth Dept., Pittsburgh Steel Co....	Pittsburgh, Pa.	'27
Kivari, A. M., Engr., The Dorr Co.....	714 Central Bldg., Los Angeles, Cal.	'16
Kiyoto, Yuichi.....	Inami-Machi, Toyamaken, Japan.	'21
[[Kjellgren, Bengt, Chem. Engr., The Brush Labs. Co....	3715 Euclid Ave., Cleveland, Ohio.	'24
†Klahre, Alfred C.....	Box 119, Times Square Station, New York, N. Y.	'28
[[Kleeman, Albert P., Production Foreman, Franco Western Oil Co., Box 308, McKittrick, Cal.		'23
Kleesattel, Richard, Min. Engr., Idaho-Nevada Consolidated Gold Mines Co....	Elk City, Idaho.	'10
†Kleiner, John L., Chief Engr., Gallup American Coal Co.....	Gamercos, N. M.	'20
Kleinpell, William D., Geol., Union Oil Co. of California, 514 Union Oil Bldg., Los Angeles, Cal.		'21
Klepetchko, Ernest, Met. Engr., Giesche Spolka Akcyjna.....	Katowice, Poland.	'15
Klepetchko, Frank, Min. & Met. Engr.....	Apt. 2483, Lima, Peru.	'80
Klepinge, John H., Engr., Draftsman, Link Belt Co....	300 W. Pershing Rd., Chicago, Ill.	'12
†Klingaman, George LeRoy, Pet. Engr., The California Co.....	Iraan, Tex.	'19
Klingender, Henry Key.....	Box 203, Salt Lake City, Utah.	'21
[[Klock, Peter I.....	Address Wanted.	'26
Klopstock, Paul, Investment Banker, Pres., Klopstock & Co., Inc., 63 Wall St., New York, N. Y.		'12

Klug, George C., Min. & Met. Engr., Messrs. Bewick Moreing & Co., 62 London Wall, London, E.C.2, England.	'01
†Klugescheid, Richard C., Attorney.....120 Broadway, New York, N. Y.	'28
Klugh, Bethune G., V.P., Southern Manganese Corp., 930 Brown Marx Bldg., Birmingham, Ala.	'07
Knaebel, Carl H.....114 Clark St., Houghton, Mich.	'21
Knaebel, Charles P., Student in Min. Engrg., Stanford Univ....Stanford University, Cal.	'28
Knapp, Arthur, Pet. Engr., The United Gas Improvement Co., Box 1902, Philadelphia, Pa.	'14
†Knapp, Eldred A.....85 Plain-an-Gwarry, Redruth, Cornwall, England.	'23
Knapp, I. N., Mech. Engr.....504 Aspen St. N. W., Takoma Park, Washington, D. C.	'01
Knappen, Russell S., Gypsy Oil Co.....Box 2044, Tulsa, Okla.	'20
Kneath, Watkin W.....155 Pelham Rd., Rochester, N. Y.	'05
Kneeshaw, F. P., Cons. Engr., Kandos Cement Co., Ltd., Herald Bldg., Box 2613 EE, G.P.O., 66 Pitt St., Sydney, N. S. W., Australia.	'26
Knerr, Horace C., Cons. Met. Engr., Pres., Met. Labs., Inc., 1116 W. Montgomery Ave., Philadelphia, Pa.	'28
Knickerbocker, Arthur K.....639 Hamm Bldg., St. Paul, Minn.	'19
Knickerbocker, R. G., Asst. Mgr., The Lewin Metal Corp.....Rolla, Mo.	'27
Kniffin, L. M., Mgr., Hanover Bessemer Iron & Copper Co., Fierro, Grant Co., N. M.	'16
Knight, Cyril W.....Royal Bank Bldg., Room 1505, Toronto, Ont., Canada.	'07
Knight, D. Atwood, Geol. & Min. Engr., Knight Engrs. Co., 531 S. Pearl St., Denver, Colo.	'21
Knight, Edward C.....Santa Barbara Club, Santa Barbara, Cal.	'94
†Knight, Frank P., Pres., Iron Cap Copper Co.....Knight Bldg., Beverly Farms, Mass.	'20
Knight, Frank P., Jr., Oxford Min. & Milling Co.....West Paris, Me.	'21
Knight, J. LeRoy F., Min. Engr., Ingénieur Directeur Adjoint, Cia. de Diamantes de Angola, Portuguese, W. Africa, Dundu, Angola, via Tshihapa, Congo Belge, W. Africa.	'22
Knight, Myron S., Cons. Min. & Civil Engr., Stevenson & Knight, 725-8 Connell Bldg., Scranton, Pa.	'14
Knight, Samuel Howell, Prof. of Geol., Univ. of Wyoming.....Laramie, Wyo.	'25
Knoebel, Irvin G.....403 S. 11th St., Belleville, Ill.	'25
Knoll, Waldemar A., Underground Supt., Steel & Tube Co. of America, Anvil Mine, Bessemer, Mich.	'23
Knowles, A. S., Pres., Tar & Pet. Process Co.....310 S. Michigan Ave., Chicago, Ill.	'19
Knowles, B. W., Mine Supt., Hedley Gold Min. Co., Ltd.....Hedley, B. C., Canada.	'16
Knowles, Eugene C., Min. Engr., S. E. Knowles Co....977 Howard St., San Francisco, Cal.	'20
Knowlton, J. W., Southern Power Co.....Charlotte, N. C.	'18
Knox, Frank S., Jr., Gen'l Mgr., Elkhorn Div., Consolidation Coal Co.....Jenkins, Ky.	'26
Knox, Glenn Augustus, Mine Supt., Gunn Quealy Coal Co.....Quealy, Wyo.	'23
Knox, Henry Hobart, Min. Engr.....160 Broadway, New York, N. Y.	'92
Knox, John, Asst. Gen'l Mgr., Hollinger Cons. Gold Mines, Ltd.....Timmins, Ont, Canada.	'17
Knox, T. K., Texla Royalty Co., 614 American Exchange National Bank Bldg., Dallas, Tex.	'26
Ko, Sokichi, Kyushu Univ.....Fukuokaken, Japan.	'12
Kobey, Silas M., Student, Colorado School of Mines.....Golden, Colo.	'29
Kobuse, Junjiro, Met. Engr., Pres., Nagatsuka Scientific Institute; Mngng. Dir., Safest Safe Mfg. Co., 7-1 Chome, Ginza, Kyobashi-Ku, Tokyo, Japan.	'10
Koby, John A., Min. Engr., McGraw-Hill Publishing Co., 10th Ave. & 36th St., New York, N. Y.	'28
Koch, Carleton S., Pres., Fort Pitt Steel Casting Co.....McKeesport, Pa.	'20
Koch, George B., Gen'l Foreman, South Altoona Foundries, Pennsylvania Railroad Co., Altoona, Pa.	'13
Koch, Walter H.....Box 232, St. Stephen, N. B., Canada.	'29
Koch, William Finkler, Min. Engr., Sales Engr., Explosives & Naval Stores, Hercules Powder Co., 618 Kearns Bldg., Salt Lake City, Utah.	'26
Kockum, Erik.....Kockums Jernverk, Kallinge, Sweden.	'20
Koerberlin, F. R., Cons. Geol.....Casilla 2200, Santiago, Chile.	'23
†Koehring, Roland P., Met., Moraine Products Co.....Dayton, Ohio.	'29
Koelker, Karl L., Min. Engr., Mine Valuations & Examinations, Joplin National Bank Bldg., Joplin, Mo.	'21
Koelle, Carl.....Aguesstrasse 6, Hamburg 39, Germany.	'96
Koenen, A. T., Granby Cons. Min. Smelt. & Power Co., Ltd.....Allenby, B. C., Canada.	'25
Koenig, Robert P., Min. Geol.....14 Wall St., New York, N. Y.	'24
†Koepel, N. F., Andes Copper Min. Co.....Potrerillos, Chile, Via Antofagasta.	'22
†Koepler, Walter Edgar Ellsworth, Pocahontas Operators Assn., Bailey Bldg., Bluefield, W. Va.	'25
†Koeppel, Emil, Thomas Bennett & Emil Koeppel, 7826 Fifth Ave., Cor. 79th St., Brooklyn, N. Y.	'22
Koerner, William, Gen'l Mgr., Magma Copper Co.....Superior, Ariz.	'19
Kohlmeyer, Ernst Tristin, Prof., Technische Hochschule & Dir., Metallhüttenmännische Instituts, Hardenbergstrasse 35, Charlottenburg, Germany.	'28
Kojima, Jintaro, Min. Engr., Furukawa Min. Co., Ltd., Marunouchi, Tokyo, Japan.	'06
Kollar, Ray Eustace, Engrg. Dept., Carter Oil Co.....Seminole, Okla.	'26



Kollberg, Frederick B., Great Western Tile Co.....	152 N. La Brea Ave., Los Angeles, Cal.	'19
Kolwey, Herman G., Supt., Mayari Div., Bethlehem Cuba Iron Mines Co.,	Felton, Oriente, Cuba.	'27
†Komar, George M.....	446 Howard Ave., Brooklyn, N. Y.	'23
Konkoff, Waldemar I., Graduate Student, Economic Geol.,	Livingston Hall, Room 716, Columbia Univ., New York, N. Y.	'24
Konselman, Albert S., Min. Engr., Mgr., The Barbara Marshay Mines, Ltd., Prescott, Ariz.		'29
†Kornfeld, Sam, Pet. Geol. & Engr.....	231 E. 20th, Tulsa, Okla.	'20
Koropp, Karl H., Student, Univ. of Arizona.....	Tucson, Ariz.	'29
Kosicki, Witold Wattia, Cons. & Met. Engr., J. T. Wing & Co.....	Detroit, Mich.	'19
Kostenbauder, Adnah G., Associated with H. S. Smith,	1003 Coal Exchange Bldg., Wilkes-Barre, Pa.	'27
Kowalke, O. L., Prof. of Chem. Engrg., Univ. of Wisconsin.....	Madison, Wis.	'19
†Koyen, Walter R., Min. Engr.....	610 Barron Ave., Woodbridge, N. J.	'27
Kozlinsky, Nicholas L., Pittsburgh Coal Co., Champion 1, R. F. D. 1.....	Imperial, Pa.	'28
Kraemer, Frank Joseph.....	100 Ocean Drive, Box 704, Miami Beach, Fla.	'14
Kraft, Philip, Min. Engr.....	14 Wall St., Room 1507, New York, N. Y.	'17
Kramer, Ralph E., Mgr. for Japan, Sullivan Machinery Co.,	1 Nichome, Hon-cho, Nihonbashi-ku, Tokyo, Japan.	'24
Kraus, Charles A., Prof. of Chem. & Dir. of Research, Brown Univ., Providence, R. I.		'25
Kraus, Edgar, Chief Geol., Atlantic Oil Producing Co.....	Box 817, San Angelo, Tex.	'17
Kraus, Edward H., Prof. of Crystallography & Mineralogy, Director, Mineralogical Lab.,	Univ. of Michigan, Ann Arbor, Mich.	'20
Krause, Daniel E., Student, Univ. of Wisconsin.....	Madison, Wis.	'28
Krause, Mark C., Cons. Engr.....	428 Pine St., Williamsport, Pa.	'21
Krebs, A. S., Pres., The Krebs Pigment & Chemical Co.....	Newport, Del.	'17
Krebs, Charles E., Civ. & Min. Engr., Clark & Krebs,	2307 Washington St., Charleston, W. Va.	'02
Krebs, George J., Min. Engr., Supt., Somerset Coal Dept., Reading Iron Co.,	Kimmelfton, Pa.	'01
†Krebs, Kellogg, Commercial Dept., American Cyanamid Co.,	535 Fifth Ave., New York, N. Y.	'25
Kreisinger, Henry, Research Engr., Combustion Engrg. Corp.,	200 Madison Ave., New York, N. Y.	'27
Krejci, Milo W., Met.....	483 S. Orange Ave., South Orange, N. J.	'98
†Kresse, O. A., Open Hearth Supt., Columbia Steel Corp.....	Torrance Plant, Torrance, Cal.	'27
Krickovic, Stephen, Bethlehem Mines Corp.....	Ellsworth, Pa.	'27
Kriesel, Richard M., Min. Engr.....	390 S. 14th, Salem, Ore.	'25
Kirshman, M. S., Asst. Supt., Geological Survey of India.....	27 Chowringhee, Calcutta, India.	'26
†Krivobok, Vsevolod Nicholas, Assoc. Prof., Carnegie Inst. of Tech.....	Pittsburgh, Pa.	'21
Kroepelien, Hans K. J. J., Min. Engr.....	Nora, Sweden.	'19
Krom, L. J., Cons. Met. & Engr.....	262 Oakwood Ave., Orange, N. J.	'26
†Kronquist, Emil A., Sudbury Diamond Drilling Co.....	Sudbury, Ont., Canada.	'20
Krueger, George S., Supt. of Mines, Park City Min. & Smelt. Co.....	Park City, Utah.	'14
Krumb, Henry, Cons. Min. Engr.....	401 Felt Bldg., Salt Lake City, Utah.	'05
Krumlauf, H. E., Michigan College of Min. & Tech.....	128 Dakota St., Houghton, Mich.	'28
Kruse, Frederick, V.P., The Cons. Coal Co. of St. Louis.....	165 Broadway, New York, N. Y.	'19
Kruttschnitt, Julius, Jr., Min. Engr., Dev. Dept., American Smelt. & Refin. Co.,	Fenner Bldg., Tucson, Ariz.	'07
Kubiczek, Thaddeus A., Student, Univ. of Krakow.....	Lobzowska Str. 15, Krakow, Poland.	'27
Kubo, Tohru, Min. Dept., Fushun Colliery.....	Fushun, Manchuria, China.	'22
Kubota, Tetsujiro, Mgr., Saganoseki Smelter, Nippon Industrial Co., Ltd.,	Saganoseki, Oitaken, Japan.	'27
Kubouchi, Ishitaro, Mgr., Akaike Collieries, Meiji Min. Co., Ltd.,	Tobata-shi, Fukuokaken, Japan.	'24
Kuchs, Oscar M., Andes Copper Min. Co.....	Chanaral, Chile.	'14
Kudlioh, F. Edgar, Min. Engr., Lehigh Valley Coal Co.....	Hazleton, Pa.	'24
Kugler, Hans G., Natural History Museum.....	Basel, Switzerland.	'25
Kumke, Charles A., Supt. of Mines, Kay Mines, Nevada Cons. Copper Co.....	Ray, Ariz.	'23
Kunhardt, Wheaton B., Chairman, Board of Directors, The Carpenter Steel Co.,	100 Broadway, New York, N. Y.	'80
Kunigonis, Sylvester J., Open Hearth, Lackawanna Plant, Bethlehem Steel Co.,	116 Aldrich Pl., Buffalo, N. Y.	'26
Kunimatsu, Midori, Chief Mech. Engr., Mech. Engrg. Dept., South Manchuria Railway Co.,	Fushun Colliery, S. Manchuria, China.	'23
†Kunz, George F., Gem Expert, Tiffany & Co.....	409 5th Ave., New York, N. Y.	'83
Kurata, Kamckichi, Mngng. Dir., Iwaki Coal Min. Co.....	Tokyo, Japan.	'21
Kursell, H. A., Min. Engr., American Smelt. & Refin. Co.....	120 Broadway, New York, N. Y.	'18
Kurtz, Edward L.....	315 E. Washington St., New Castle, Lawrence Co., Pa.	'94
Kuryla, M. H.....	Apt. 3, Pachuca, Hgo., Mexico.	'08
Kuzell, Charles R., Met., Smelter Supt., United-Verde Copper Co.....	Clarkdale, Ariz.	'12

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Kwang, K. Y.	39 Race Course Rd., British Concession, Tientsin, N. China.	'91
Kwasha, George	Kavalerlagskaya 8, Apt. 10, Leningrad, U.S.S.R.	'18
Kynor, Herbert D., Mgr., The Northumberland Min. Co.	Shamokin, Pa.	'15
LaBar, Paul R., Student, Lafayette College	Easton, Pa.	'24
Labarthe, Jules, Met. Engr.	500 Royal Bank Bldg., Winnipeg, Man., Canada.	'10
Labarthe, Warren A.	c/o Bunker Hill & Sullivan M&C Co., Kellogg, Idaho.	'26
Labaw, Joseph P., Min. Engr.	Hopewell, N. J.	'20
Lachmund, Oscar, Min. Engr. & Met.	226 Patterson Bldg., San Pedro, Cal.	'14
La Croix, Morris F., Min. Engr.	82 Devonshire St., Boston, Mass.	'11
Ladd, David H., Min. & Met. Engr.	Birmingham, Mich.	'10
Ladner, Albert L., Geophysical Dept., The Texas Co.	Foster Bldg., Denver, Colo.	'27
Ladoo, Raymond B., Min. Engr., United States Gypsum Co.	300 W. Adams St., Chicago, Ill.	'14
Lager, Albert F., Engr., Siosi Oil Corp.	Box 364, Terre Haute, Ind.	'25
Lahee, Frederic H., Pet. Geol., Chief Geol., Sun Oil Co., American Exchange National Bank Bldg., Dallas, Tex.		'19
Lain, J. B., Met.	Box 598, Reno, Nev.	'16
Laing, E. Leslie, Min. Engr.	Iron River, Mich.	'19
Laist, Frederick, James Douglas Medallist, A.I.M.E., 1923; Gen'l Met. Mgr., Anaconda Copper Min. Co., 25 Broadway, New York, N. Y.		'13
Laizure, Clyde McK., District Min. Engr., State Div. of Mines & Min., 3rd Floor, Ferry Bldg., San Francisco, Cal.		'29
Lajat, Louis A., Gen'l Mgr., Cie. Franco-Coloniale des Riz, Rue du Quai, Port-au-Prince, Haiti, W. I.		'20
Lake, Joseph F., V.P., Charleston Coal Co.	Charleston, Ark.	'30
Lake, Mack C., Cons. Geol., M. A. Hanna Co.	1300 Leader Bldg., Cleveland, Ohio.	'21
LaLanen, Cornelius B., Min. & Mech. Engr., Gen'l Mgr., Nevada Cons. Copper Co., McGill, Nev.		'00
Lamar, J. Everts, Geol., Illinois State Geol. Survey	Urbana, Ill.	'22
Lamb, Mark R., Min. Engr.	Boston Bank Bldg., Buenos Aires, Argentina.	'01
Lamb, Warren Vernon, Div. Engr., Hillman Coal & Coke Co.	Box 394, Brownsville, Pa.	'27
Lambie, Robert Morrison, Chief, Dept. of Mines, State of West Virginia, Capitol Bldg., Charleston, W. Va.		'26
Lamborn, Raymond E., Instructor, Orton Hall, Ohio State Univ.	Columbus, Ohio.	'21
Lambourne, G. W., Pres., Park City Min. & Smelt. Co., Daly Min. Co., Salt Lake City, Utah.		'14
Lambright, Paul W., Engr., Gaslift and Natural Gasoline Operations, Standard Oil Co., S. A., Avenida Rogue Saenz Pena 567, Buenos Aires, Argentina.		'29
LaMend, Norman E., Shattuck Denn Min. Corp.	120 Broadway, New York, N. Y.	'21
Lamont, L. D., Division Supt., Philadelphia & Reading Coal & Iron Co., Pottsville, Pa.		'22
La Montagne, Robert Weir, Cons. Engr.	30 Church St., New York, N. Y.	'30
Lamoreaux, William Francis, V.P. & Gen'l Mgr., Ducktown Chemical & Iron Co., Isabella, Tenn.		'23
Lance, Alfred Emerson, Westminster Bank, Ltd., 34 Sloane Square, London, S.W.1, England.		'29
Landers, W. H., Cons. Engr., Chief Engr., Glidden Co.	Cleveland, Ohio.	'03
Landes, Henry, Prof. of Geol., Univ. of Washington	Seattle, Wash.	'04
Landfield, J. B.	St. Helena, Cal.	'02
Landgrabe, Karl L., Gen'l Supt., Tennessee Coal, Iron & R. R. Co.	Ensley, Ala.	'12
Landis, W. S., V.P., American Cyanamid Co.	511 Fifth Ave., New York, N. Y.	'20
Landon, Budd A., Asst. to Chief Engr., Climax Molybdenum Co., Box 11, Climax, Colo.		'27
Landon, Robert E., Geol., Anaconda Copper Min. Co.	Butte, Mont.	'29
Landry, George A., Asst. Supt., Western Electric Co., Hawthorne Sta.	Chicago, Ill.	'28
Lane, Alfred C., Pearson Prof. of Geol. & Mineralogy, Tufts College, Barnum Museum, Tufts College, 57, Mass.		'03
Lane, Henry M., Gray Gables	East River Dr., Grosse Ile, Mich.	'99
Lane, James A., Western Sales Mgr., Oliver United Filters, Inc., 621 Federal Reserve Bank Bldg., San Francisco, Cal.		'15
Lane, L. Ray, Engr.	Box 1066, Havana, Cuba.	'18
Lane, Travis P.	224 Farm & Merchant Bank Bldg., Long Beach, Cal.	'25
Lang, Walter B., Geol. & Min. Supervisor, U. S. Geol. Survey	Roswell, N. M.	'24
Langdon, A. C., Min. Engr., Pet., Compania Cartografica, Venezuela, Apt. 263, Caracas, Venezuela.		'20
Langdon, Palmer H., Editor, <i>The Metal Industry</i>	99 John St., New York, N. Y.	'18
Lange, H. O., Pres., Furgeson & Lange Foundry Co.	1039 Willow St., Chicago, Ill.	'19
Lange, Lawrence H.	215 Douglas Ave., Apt. 4, Salt Lake City, Utah.	'29
Langenberg, F. C., U. S. Cast Iron Pipe & Foundry Co.	Burlington, N. J.	'15
Lanning, John E., Chief Mech. Engr., United Verde Copper Co.	Clarkdale, Ariz.	'20
Lantz, Carl A., Gen'l Mgr., Cia. de Santa Gertrudis, S. A.	Pachuca, Hgo., Mexico.	'16
Lanza, A. J., Asst. Medical Dir., Metropolitan Life Ins. Co., 1 Madison Ave., New York, N. Y.		'18

Larimer, James I., Asst. Supt., South Chicago Works, Illinois Steel Co., 89th St., Chicago, Ill.	'20
Larpenteur, Bernard J., The Dorr Co.....247 Park Ave., New York, N. Y.	'25
Larry, Ralph E., Supt., Pittsburgh Limestone Co.....Annandale Mines, Boyers, Pa.	'21
Larsen, Esper S., Prof. of Petrography, Harvard Univ.....Cambridge, Mass.	'23
†Larsen, George V., Assayer, La Bellevue Min. Co.....Granite, Ore.	'25
Larsen, Lewis P., Pres., Pend Oreille Lead & Zinc Co.....Metaline Falls, Wash.	'20
Larsen, Raymond M., Asst. Pet. Engr., U. S. Geol. Survey, 316 Federal Bldg., Salt Lake City, Utah.	'24
Laresh, Walter S., Min. Engr., Gen'l Supt. of Mines, Nevada Cons. Copper Co., Ruth, Nev.	'15
Larson, Leonard, Asst. Smelter Supt., Nevada Cons. Copper Co.....McGill, Nev.	'19
Larson, Uno O., Gen'l Mgr., Kockums Jernverk.....Kallinge, Sweden.	'20
LaRue, W. G.....2647 Brighton Ave., Los Angeles, Cal.	'88
Lary, Howard N., Geol. Empire Zinc Co.....Gilman, Colo.	'24
Lasier, E. L., Cons. Engr.....Box 304, Oakland, Cal.	'19
Lasier, Frederick G., Cons. Min. Engr. R.F.D.4.....Holly, Mich.	'07
Lasky, Bernard H., Pet. Engr. & Geol.....907 Atlas Life Bldg., Tulsa, Okla.	'15
†Lasky, Samuel G.....Box 522, Socorro, N. M.	'21
Lasley, W. M., Pres., Southern Clay Mfg. Co...1101-6 Provident Bldg., Chattanooga, Tenn.	'00
Lassiter, Robert G., Pres., Robert G. Lassiter & Co.....Oxford, N. C.	'09
Lasso, Moises Perogordo y, Min. & Civil Engr., 9a de Liverpool 156, Mexico City, D. F., Mexico.	'20
Latham, Marc. L., Mine & Mill Operator, Latham & Goble...75 Vernon St., Oakland, Cal.	'14
Lathe, Frank E., Tech. Asst. to Pres., National Research Council, Ottawa, Ont., Canada.	'15
Latimer, Bertrand J., Supt., Nebraska Cement Co.....Superior, Neb.	'20
Laucks, Irving F., Min., Met. Engr. & Chem., 314 Maritime Bldg., 3rd Floor, Madison St. & Western Ave., Seattle, Wash.	'12
Lauer, Herbert H., Constr. Engr., Atlas Portland Cement Co., 25 Broadway, New York, N. Y.	'15
Lauer, R. E., Met., Chicago Pneumatic Tool Co.....6201 Second Ave., Detroit, Mich.	'24
†Laurell, Eric Emil, Mine Foreman, Anglo-Chilean Cons. Nitrate Co., Casilla 17, Tocopilla, Chile.	'25
Laurie, Frank C., V.P., & Gen'l Mgr., Lago Pet. Corp.....Maracaibo, Venezuela.	'10
Laurie, Robert Balfour, Mines Mgr., Park-an-chy, Tin, Ltd., Park-an-chy, Scorrier, Truro, Cornwall, England.	'23
Lauzon, Phil, Ingersoll-Rand Co.....441 W. High St., Painted Post, N. Y.	'29
Lavery, Vaughan Metcalfe, Asbestos Corp.....Thetford Mines, Que., Canada.	'09
Lavrov, Sergey E., Min. Engr., Assayer, Federal Min. & Smelt. Co.....Page, Idaho.	'26
Lawall, Charles E., Head, School of Mines, West Virginia Univ., 121 Mechanical Hall, Morgantown, W. Va.	'24
Lawall, Elmer H., Min. Engr.....Wilkes-Barre, Pa.	'98
Lawr, C. W., Met.....322 W. Missouri St., El Paso, Tex.	'16
Lawrence, Charles E.....Caspian, Iron Co., Mich.	'93
Lawrence, Frank V., Gen'l Mgr., Interstate Equipment Corp., 25 Church St., New York, N. Y.	'21
Lawrence, Horace Marshall, Met.....Box 630, Bartow, Fla.	'20
Lawrence, Victor H., Met. Engr., Alan Wood Iron & Steel Co.....Conshohocken, Pa.	'27
Lawrence, Walter L., Min. Engr.....719 Delaware St., Scranton, Pa.	'83
Lawrie, H. N., Mngng. Dir., American Gold & Silver Inst., 1001 15th St. N. W., Washington, D. C.	'07
Lawry, Arthur H., Gen'l Supt., Goldfield Cons. Mines Co.....Goldfield, Nev.	'28
Laws, E. H., Met.....919 First Ave., Salt Lake City, Utah.	'14
Lawson, A. Werner, Min. Engr., American Founders Corp...50 Pine St., New York, N. Y.	'21
Lawson, Andrew C., Prof. of Geol. & Mineralogy, Univ. of California...Berkeley, Cal.	'14
†Lawton, Lewis H., Sec. & Gen'l Mgr., Jonathan Bartley Crucible Co...Trenton, N. J.	'18
Lawton, N. O.....Rouyn, Que., Canada.	'10
Layne, Mark B., Student, Missouri School of Mines.....Rolla, Mo.	'28
†Layng, Edward C.....Forest Drive, Short Hills, N. J.	'20
Lea, John, Supt., Cia. Minera Justicia, S. A.....Estación Marquez, Chih., Mex.	'19
Leach, Robert H., Min. Engr., Handy & Harman.....Bridgeport, Conn.	'13
Leake, William Edward.....908 Southern Railway Bldg., Birmingham, Ala.	'21
Leary, Daniel F., Asst. to Head, Oil Production & Oil Pipeline Dept., Henry L. Doherty & Co., Room 1201, 60 Wall St., New York, N. Y.	'27
†Leary, Daniel J., Contracting Engr.....876 Fifth Ave., New York, N. Y.	'81
†Leavell, John H., Pres., The Leavell Coal Co.....Box 1567, Tulsa, Okla.	'07
Leaver, Edmund S., Met., Supervising Engr., U. S. Bureau of Mines.....Reno, Nev.	'17
Lebedeff, Y. E., Experimental Chem., American Smelt. & Refin. Co.....Omaha, Neb.	'25
LeBoutillier, Clement, Chem. & Met.....4620 Wolf Rd., Western Springs, Ill.	'91
Le Bret, Jean.....44 Avenue Gabriel, Paris, France.	'98
LE CHATELIER, H., Prof.....75 rue Notre Dame des Champs, Paris, France.	'05
LeClercq, Robert R., Geol., Geol. Dept., Yale Univ.....New Haven, Conn.	'24

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Lederer, E. R., Texas Pacific Coal & Oil Co.,	
Farmers & Merchants Bank Bldg., Ft. Worth, Tex.	'22
Lednický, V. E., Min. Engr.....	Box 334, Manila, P. I. '23
Lednum, E. T., Mgr., E. I. du Pont de Nemours & Co.,	
1814 McCormick Bldg., Chicago, Ill.	'15
Ledoux, Frederic, Societe Minière et Metallurgique, De Penarroya,	
Place Vendôme, 12, Paris, France.	'97
Ledoux, Louis V., Pres., Ledoux & Co.....	.99 John St., New York, N. Y. '24
Lee, Arthur H.....	411 North Main St., Wallingford, Conn. '87
Lee, Chester F., Min. Engr.....	602 Colman Block, Seattle, Wash. '03
†Lee, Clarence O., Field Engr., Freeport Sulphur Co.....	Freeport, Tex. '28
Lee, Frank E., Sec., Nichols Copper Co.....	25 Broad St., New York, N. Y. '24
Lee, Frederick W., U. S. Bureau of Mines.....	Washington, D. C. '28
Lee, George M., Smelter Supt., Granby Consolidated Min., Smelt. & Power Co., Ltd.,	
Box 153, Anyox, B. C., Canada.	'21
Lee, Hal Carleton, Industrial Engr., National Carbon Co., Inc.....	Niagara Falls, N. Y. '20
Lee, Harley C., Research Chem., Dolomite, Inc., Ohio State Univ.,	
Lord Hall, Columbus, Ohio.	'29
Lee, Henry, Min. Engr., Partner, McIntosh & Lee, Bell Mine....	Beaverdell, B. C., Canada. '21
Lee, Hugh B., The Maumee Collieries Co.....	Terre Haute, Ind. '16
Lee, J. Latimer, Min. Engr., Susquehanna Collieries Co.,	
Miners Bank Bldg., Wilkes-Barre, Pa.	'26
Lee, J. M., Oliver United Filters, Inc.....	150 Southampton Row, London, W.C.1, England. '23
Lee, Marvin, Cons. Pet. Geol., Marvin Lee-J. L. Garlough, 612 Brown Bldg., Wichita, Kans.	'21
Lee, Robert E., Jr., Min. Engr., Willow Creek Mines Co.....	Wasilla, Alaska. '29
Leemans, P. Joseph, Cons. Engr. & Administrator, Societe Generale Metallurgique de	
Hoboken, Hoboken, Antwerp, Belgium.	'25
Lees, John W., Gen'l Supt., Inland Steel Co.....	Indiana Harbor, Ind. '16
LeFevre, Solomon, Cons. Min. Engr.....	Forest Glen, Ulster Co., N. Y. '93
Leflingwell, W. H., Civ. & Min. Engr.,	
430 I. W. Hellman Bldg., 124 W. Fourth St., Los Angeles, Cal.	'01
Leggat, Alexander, Min. Engr.....	Leggat Hotel, Butte, Mont. '02
Legge, Elmer E., Chief of Physical Lab., South Wks., American Steel & Wire Co.,	
Worcester, Mass.	'29
†Leggett, Henry B., Asst. Geol., Mineral Divisadero, Depto. de Morazan, El Salvador, C. A.	'23
Leggett, Thomas H., Min. Engr.....	149 Broadway, New York, N. Y. '82
Legrand, Charles, Cons. Engr., Phelps Dodge Corp., Copper Queen Reduction Works,	
Douglas, Ariz.	'14
Leh, Alden W., Draftsman, Bethlehem Fabricators.....	Bethlehem, Pa. '24
Lehman, J. George, Pres., Bethlehem Foundry & Machine Co.....	Bethlehem, Pa. '29
Lehmann, A. W., Min. Engr....	13 Chatsworth Rd., W. Norwood, London, S. E., England. '17
†Lehnertz, Clement Arthur.....	Address Wanted. '22
†Lehr, Harold D., Sales Engr., Fuller Lehigh Co.....	1101 Packard Bldg., Philadelphia, Pa. '20
Leibensperger, Raymond, Geol., Nederlandsche Koloniale Petroleum Mj.,	
Postbus 109, The Hague, Holland.	'20
†Leidy, Maurice Bert, Met. Engr.....	535 Carson St., Hazleton, Pa. '27
Leighton, Morris Morgan, Chief, Illinois Geological Survey Div.,	
305 Ceramics Bldg., Urbana, Ill.	'23
†Leighton, T. R., Prof., Min. & Met. Dept., Univ. of Chile.....	Santiago, Chile. '20
Leisenring, Edward B., General Coal Securities Corp.,	
2500 Fidelity-Philadelphia Trust Bldg., Philadelphia, Pa.	'20
†Leiter, Joseph, Zeigler Coal Co.....	21 E. Van Buren St., Chicago, Ill. '15
Leith, Charles K., Prof. of Geol., Univ. of Wisconsin,	
Room 214, Science Hall, Madison, Wis.	'03
†Leith, Kenneth.....	Room 213, Science Hall, Madison, Wis. '29
Leland, Everard, Gen'l Supt., The Moctezuma Copper Co.....	Nacozari, Son., Mexico. '12
Leland, Frank Milton.....	c/o C. C. Buck, Jacksonville, Ore. '06
Lellep, O., Research & Dev. Engr. for high temperature furnaces & processes,	
G. Polysius, Dessau, Germany.	'23
Lemke, C. A., Supt. of Mills, U. S. Smelt. Refin. & Min. Co.....	Midvale, Utah. '16
Lemmon, David.....	522 E. First South St., Salt Lake City, Utah. '10
Lennan, Thomas Frank, Mine Operator.....	Box 295, Joplin, Mo. '18
Lennox, Luther W., The Merrill Co.....	343 Sansome St., San Francisco, Cal. '18
Lenon, Robert, Student, Univ. of Arizona.....	Box 562, Univ. Sta., Tucson, Ariz. '29
Lentz, LaFayette, V.P., & Sec., General Coal Co.,	
1727 Land Title Bldg., Philadelphia, Pa.	'26
Leonard, Bart C., Mgr., Riverside Coal Min. Co.....	South Fork, Pa. '18
Leonard, F. Morton.....	3016 Tilden St., N. W., Washington, D. C. '22
Leonard, R. W., Min. Engr., Pres., The Coniagas Mines, Ltd.,	
50 Ontario St., St. Catharines, Ont., Canada.	'94

Leonard, Robert, Gen'l Mgr., Luena Coaleries, Luena, Katanga, Belgian Congo, Via Cape Town, Africa.	'28
Leonard, W. D., Min., Henrietta Mines Co.....	Leadville, Colo. '15
Leonard, W. H., Pres., Gardner-Denver Co.....	Box 1020, Denver, Colo. '13
Leonardon, Eugene Gilbert, Mgr., Schlumberger Electrical Prospecting Methods, 25 Broadway, New York, N. Y.	'28
Lepper, Gordon Willis, Senior Geol., The Burmah Oil Co., Ltd....	Nyaunghla, Burma, India. '27
Leppien, Edward, Sec. & Treas., Oxide Metals Corp.....	Spenceville, Cal. '20
Lepsoc, Robert, Metallist, Engrg. Soc. of Norway, 1924; Cons. Met. Engr., Cons. Min. & Smelt. Co. of Canada, Trail, B. C., Canada.	'21
Lerchen, Frank H., Mgr., Montana Mines Operations, Eagle-Picher Lead Co.....	Ruby, Ariz. '30
LeRumeur, Joseph G., Technical Director, Société Minière et Métallurgique de Penarroya, Penarroya, Cordoba, Spain.	'29
Leshner, Carl Eugene, Geol. & Min. Engr., Asst. to Pres., Pittsburgh Coal Co., Henry W. Oliver Bldg., Pittsburgh, Pa.	'20
Leslie, Eugene H., Western Mgr., Engrg. & Min. Journal, McGraw-Hill Bldg., Michigan & Grand Aves., Chicago, Ill.	'14
Lesniak, S. W., Geol., Geol. Dept., Lago Pet. Corp., Apt. 172, Maracaibo, Venezuela.	'18
Lesser, D. B., Sec'y-Treas. & Gen'l Mgr. Southern Steel & Rolling Mill, Inc., 3900 10th Ave. N., Birmingham, Ala.	'28
Lessner, Charles, Met. Chem.....	Carriil, Spain. '07
Letcher, Owen, Award, Miners Assn., Devon & Cornwall, 1902; Editor, <i>Min. &amp; Industrial Magazine &amp; Rhodesian Min. Jnl.</i> , 46 Anderson St., Johannesburg, Transvaal, S. Africa.	'25
Letchworth, P. E.....	159 Myrtle St. Claremont, N. H. '24
LeVan, Lloyd A., Asst. Min. Engr., The Lehigh Coal & Navigation Co., Lansford, Pa.	'19
LeVasseur, Charles, Cons. Engr. & Geol., White River Power Co.....	Yellville, Ark. '29
Levensaler, Lewis A., Min. Engr.....	1110 Hoge Bldg., Seattle, Wash. '03
Levin, N. D., Chief Engr., Min. Dept., Jeffrey Mfg. Co., First Ave. & Big Four Tracks, Columbus, Ohio.	'20
Levinger, David, Engr., Western Electric Co., Inc....	195 Broadway, New York, N. Y. '18
Levorsen, A. Irving, Independent Oil & Gas Co.....	Tulsa, Okla. '18
Levy, Arthur Gustavus, Supervisor, Seismograph Prospecting, The Texas Co., Drawer F, Houston, Tex.	'29
Levy, Ernest, c/o Alex. Hill & Stewart, 4 Broad Street Pl., London, E.C.2, England.	'17
Levy, Frank M., Chief Chem. & Met., Mueller Brass Co.....	Port Huron, Mich. '27
†Lewis, A. K., V.P., Columbia Steel Co.....	Butler, Pa. '25
Lewis, A. L., Asst. to Mgr., Braden Copper Co.....	Sewell, via Rancagua, Chile. '21
†Lewis, Alvin, Chem. Engr., Embossing Machine Co., Inc., 935 Broadway, New York, N. Y.	'24
Lewis, C. M., Mine Owner.....	10th Floor, Arctic Bldg., Seattle, Wash. '99
Lewis, Charles F., Sales Mgr., The E. W. Carpenter Mfg. Co., Railroad Ave., Bridgeport, Conn.	'28
Lewis, Essington, Gen'l Mgr., The Broken Hill Proprietary Co., Ltd., 422 Little Collins St., Melbourne, Vic., Australia.	'18
Lewis, Frank E., Min. Engr., Chisos Min. Co.....	Terlingua, Tex. '19
Lewis, George, Gen'l Mgr. & Chief Engr., Moffat Tunnel Commission, 1731 Arapahoe St., Denver, Colo.	'26
Lewis, H. Edgar, V.P., Bethlehem Steel Co.....	Bethlehem, Pa. '24
Lewis, Harmon, Cons. Engr., V.P., American Bauxite Co., 1111 Harrison Bldg., Philadelphia, Pa.	'20
Lewis, J. H.....	835 Indian Rock Ave., Berkeley, Cal. '18
Lewis, J. Volney, Staff Geol., The Gulf Oil Co.....	21 State St., New York, N. Y. '95
Lewis, James O., Pet. Engr., Dunn & Lewis.....	507 Commercial Bldg., Tulsa, Okla. '18
Lewis, John M., Chief Engr., Houston Coal Co., 1522 Union Trust Bldg., Cincinnati, Ohio.	'15
Lewis, Kenneth B., Engr., Morgan Constr. Co.....	Worcester, Mass. '22
Lewis, R. A., Gen'l Supt., Bethlehem Plants, Bethlehem Steel Co.....	Bethlehem, Pa. '19
Lewis, Raymond, Cons. Engr.....	Box 113, Shamokin, Pa. '23
Lewis, Robert S., Prof. of Min., Univ. of Utah.....	Salt Lake City, Utah. '06
Lewis, Telford, V.P., Knickerbocker Fuel Co.....	543 Vine St., Johnstown, Pa. '20
Lewis, William A.....	260 Culver Ave., Jersey City, N. J. '20
Lewis, William B., Pres., The Oakdale Coal Co.....	40 Wall St., New York, N. Y. '16
Lewis, William Frank.....	c/o Dr. McKnight, Sanatorium, Tex. '14
†Lewisohn, Adolph, Pres., Miami Copper Co.....	61 Broadway, New York, N. Y. '15
Ley, Henry A., Pet. Engr., Gen'l Mgr., The Elmwood Oil & Gas Co., 117 E. 6th St., Tulsa, Okla.	'17
Lheraud, Alexandre, Gen'l Dir., Societa di Pertusola, Piazza Rovere 7, Via Arsarotti 44, Genoa, Italy.	'18
Li, Kuo C., Cha Ho decoration by Pres. of Republic of China, November, 1922; Pres., Wah Chang Trading Corp., Room 4901 Woolworth Bldg., 233 Broadway, New York, N. Y.	'16

Libby, James L., Asst. Chief Engr., Union Pacific Coal Co., U. P. Coal Co. Bldg., Rock Springs, Wyo.	'29
Lidbury, F. Austin, Pres., Oldbury-Electro Chemical Co., Niagara Falls, N. Y.	'16
Liddell, Donald M., Weld & Liddell.....	2 Rector St., New York, N. Y. '16
†Liddle, Ralph Alexander, Geol., The Pure Oil Co.....	Box 1007, Fort Worth, Tex. '21
Lidgerwood, John H., Pres., Lidgerwood Mfg. Co.....	96 Liberty St., New York, N. Y. '02
Lieb, Victor E., Geol., Republic Production Co.....	1817 Petroleum Bldg., Houston, Tex. '16
Lihme, C. Bai.....	950 Fifth Ave., New York, N. Y. '99
Lilley, Ernest R., Assoc. Prof. of Geol., New York Univ., University Heights, New York, N. Y.	'27
Lilligren, J. M., District Geol., Sinclair Oil & Gas Co.....	Box 254, Enid, Okla. '18
Linch, Harry A., Chief Service Engr., The Dorr Co., 247 Park Ave., New York, N. Y.	'17
Lincoln, Francis Church, Prof. of Min. Engrg., South Dakota School of Mines, Rapid City, S. D.	'03
Lincoln, John J., Gen'l Mgr., Upland Coal & Coke Co., Elkhorn, McDowell Co., W. Va.	'99
Lincoln, Paul, Mgr., The Noble Five Mine.....	Sandon, B. C., Canada. '20
Lind, John G., Prof. of Geol. & Min., Weber College.....	Ogden, Utah. '26
Lindau, S. Paul, Engr., Western Precipitation Co., 1016 W. 9th St., Los Angeles, Cal.	'12
Lindberg, Carl O., Min. Engr.....	36th Floor, 233 Broadway, New York, N. Y. '07
Lindell, Karl Victor, Idle Hour Club.....	Box 2019, Sudbury, Ont., Canada. '28
Lindemuth, Lewis B., Asst. to the Pres., Ludlum Steel Co.....	Watervliet, N. Y. '14
Lindenau, Edward Martin, Min. Engr., Chile Exploration Co., Chuquicamata, Chile.	'26
Lindgren, Waldemar, Geol., Mass. Inst. of Tech.....	Cambridge, Mass. '00
Lindholm, M. S., Chief Geol., Calumet & Arizona Min. Co.....	Warren, Ariz. '17
Lindmueller, Charles, Supt., Metal & Thermit Corp., 151st & McCook Ave., East Chicago, Ind.	'16
Lindsay, Adrian K., Cia. Minera Choco Pacifico, Andagoya, Via Buenaventura, Colombia.	'28
Lindsay, John A. M., Chief Engr., Broken Hill Prop. Co., Broken Hill, N. S. W., Australia.	'99
†Lindsay, L.....	Hambrook House, Chichester, England. '04
Lindsay, William L.....	308 W. Church St., Benton, Ill. '27
Lindsay, William R., Gen'l Supt., The Granby Cons. Min., Smelt. & Power Co., Ltd., Anyox, B. C., Canada.	'14
Lindsey, James.....	c/o Robert B. Moorhead, 215 W. 88th St., New York, N. Y. '01
Lindsley, Thayer.....	100 Adelaide St. W., Toronto, Ont., Canada. '17
Lindsly, Ben E., Pet. Engr., U. S. Bureau of Mines.....	Bartlesville, Okla. '24
Linforth, Frank A., Asst. Chief Geol. & Asst. Chief Min. Engr., Anaconda Copper Min. Co., 526 Hennessy Bldg., Butte, Mont.	'08
Lingle, Chester M.....	Nemacolin, Greene Co., Pa. '03
Lingo, George A., Min. Engr.....	Fairbanks, Alaska. '27
†Link, Charles W., Supt., Berwind Fuel Co. of West Virginia.....	Berwind, W. Va. '28
†Link, Theodore A., Geol., Geol. Dept., Imperial Oil, Ltd.....	Calgary, Alta., Canada. '20
†Linker, Miss Sophy.....	286 Eastern Parkway, Brooklyn, N. Y. '22
Linn, Herbert Karl, Min. Engr., Chief Engr., Climax Molybdenum Co., Box 4, Climax, Lake Co., Colo.	'27
Linn, William J., Combination Export Mgr.....	308 Euclid Ave., Cleveland, Ohio. '07
Linney, Joseph Robert, V.P., Chateaugay Ore & Iron Co.....	Lyon Mountain, N. Y. '20
Linney, W. H.....	1635 W. State St., Long Beach, Cal. '06
Linthicum, J. F., Mgr., Sales Dept., Aluminum Co. of America, 2400 Oliver Bldg., Pittsburgh, Pa.	'28
Lintner, Edwin J., Mgr., Truck and Bus Dept., B. F. Goodrich Rubber Co., St. Louis, Mo.	'13
Linton, Robert, Min. Engr., V.P. & Gen'l Mgr., Pacific Clay Products, 1151 South Broadway, Los Angeles, Cal.	'00
Linville, Clarence P., Met., The Calco Chem. Co.....	Bound Brook, N. J. '04
Lisboa, Miguel A. R., Cons. Min. Engr., Caixa Postal 829, Rio de Janeiro, Brazil.	'02
†Litchfield, Lawrence, Jr., Min. Engr. & Geol., Republic Min. & Mfg. Co. & American Bauxite Co., 1111 Harrison Bldg., Philadelphia, Pa.	'22
Littauer, Stanislav, Min. Engr., Combustion Utilities Corp., 60 Wall St., New York, N. Y.	'21
Little, Archibald.....	2, Lyndhurst Gardens, Hampstead, N.W.3, London, England. '01
Little, Archibald.....	Room 530, 149 Broadway, New York, N. Y. '20
Little, Arthur D., Chem. Engr., Pres., Arthur D. Little, Inc., 30 Charles River Rd., Cambridge, Mass.	'15
Little, B. P.....	3463 Richmond Blvd., Oakland, Cal. '20
Little, James E., Mech. Engr., Bethlehem Steel Co.....	Bethlehem, Pa. '09
Little, James M., Min. Engr.....	64 Park Ave., Bloomfield, N. J. '19
Livermore, Robert, Min. Engr., Partner, Hutchinson & Livermore, 201 Devonshire St., Boston, Mass.	'23
Livingston, Ivor.....	107 Flagler Apts., 22 & H Sts. N. W., Washington, D. C. '14
†Livingston, Louis, Sales Engr., Barco Mfg. Co.....	1801 Winnemac Ave., Chicago, Ill. '20



Livingston, S. W., Cons. Min. Engr., Dominion Express Bldg., Montreal, Que., Canada.	'09
Livingston, William S., Jr.....269 Nelson Rd., Scarsdale, N. Y.	'17
Livingstone, C. H.....1234 Humboldt St., Denver, Colo.	'89
Livingstone, Edward A., District Sales Mgr., A. O. Smith Corp. of Milwaukee, Room 1750, 120 Broadway, New York, N. Y.	'29
Livingstone, Robert, Supt., Galt Mines, Canadian Pacific Ry. Dept., Natural Resources Galt Mines, Lethbridge, Alta., Canada.	'09
Lloyd, E. Russell, Geol., Fisher & Lowrie.....Box 776, Midland, Tex.	'19
Lloyd, Richard L., Met. Engr., V.P., Dwight & Lloyd Sintering Co., Inc., Evening Post Bldg., 75 West St. New York, N. Y.	'16
Lloyd, T. W., Cons. Engr.....401 Brown-Marx Bldg., Birmingham, Ala.	'17
Lo, Hang Yeuk, "U-Un" Entrada Adolfo Loureiro.....Macao, China.	'26
Locke, Augustus, Min. Geol.....788 Mills Bldg., San Francisco, Cal.	'11
Locke, Charles E., Prof. of Min. & Ore Dressing, Mass. Inst. of Tech., Cambridge, Mass.	'04
†Locke, David Roger.....520 W. Elmira St., San Antonio, Tex.	'20
Locke, Preston, Resident Engr., American Smelt. & Refin. Co., Room 135, 117 Fenchurch St., London, E.C.3, England.	'17
Lockhart William Roy, Pet. Geol.....2320 Volney Rd., Youngstown, Ohio.	'28
Lockwood, Benoni, Jr., Min. Engr., Danli Co., Agua Fria Mina, Danli, Honduras, C. A., via New Orleans.	'26
Lodge, Richard W.....Box 307, Redlands, Cal.	'83
†Loeb, Carl M., V.P., American Metal Co.....61 Broadway, New York, N. Y.	'12
Loeffler, George O., Met., Sales Engr., Climax Molybdenum Co., 1214 Bessemer Bldg., Pittsburgh, Pa.	'20
Loel, Wayne, Cons. Geol.....812 Subway Terminal Bldg., Los Angeles, Cal.	'20
†Loerch, E. George, Min. Engr., Howard N. Eavenson & Associates, 1302 Union Trust Bldg., Pittsburgh, Pa.	'23
Loerpabel, W. Harrison, Supt., Mina Tiro General.....Charcas, S. L. P., Mexico.	'15
Logan, John W., Sec., Alan Wood Iron & Steel Co....Widener Bldg., Philadelphia, Pa.	'12
Logan, William W., Min. Engr., Supt., Mercury Mines, Gottville Siskiyou Co., Cal.	'17
Logue, C. L., Min. Engr., Supt., Gold King Mine.....LaPlata, Colo.	'19
Lohman, Henry William, United Zinc Smelt. Corp.....Moundsville, W. Va.	'22
Lokken, John C., Concentrator Met., International Smelt. Co.....Tcoele, Utah.	'24
Lombardi, M. E., Dir., Standard Oil Co. of California, 225 Bush St., San Francisco, Cal.	'14
London, C. J., London & Parrish.....Barranquilla, Colombia.	'11
Lonergan, Jay, Min. & Met. Engr., Chief Engr., Royal Dev. Co., 238 N. Wenatchee Ave., Wenatchee, Wash.	'13
Long, Arthur R., Pres., Brookside-Pratt Min. Co. & Supreme Min. Co., 747 Brown-Marx Bldg., Birmingham, Ala.	'26
Long, F. L., Asst. Supt., The Portsmouth By-Products Coke Co.....Edgarton, W. Va.	'26
Long, James A., Gen'l Mgr., Woodward Iron Co.....Woodward, Ala.	'28
Long, James I., Pres., American Redwood Co., 1415 Manhattan Pl., Los Angeles, Cal.	'97
Long, Wilbur L., Min. Engr., Island Creek Coal Co.....Holden W. Va.	'24
Longenecker, Charles, Managing Editor, <i>Steel Publications, Inc.</i> , Thaw Bldg., 108 Smithfield St., Pittsburgh, Pa.	'29
Longley, Alfred Latting, Chief Draftsman, Geol. Dept., Anaconda Copper Min. Co., 526 Hennessy Bldg., Butte, Mont.	'20
Longmire, W. R., Geol., Gypsy Oil Co.....918 First National Bank Bldg., Tulsa, Okla.	'20
Longmore, E. L., Cons. & Met. Engr., Mill Supt., Hollinger Cons. Gold Mines, Ltd., Box 144, Timmins, Ont., Canada.	'17
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Longworth, F. J., Mgr., Tennessee Copper Co.....Copperhill Tenn.	'18
Longyear, E. J., Min. Engr., E. J. Longyear Co., 710 Security Bldg., Minneapolis, Minn.	'92
Longyear, J. M., Jr., Min. Engr.....216 E. Hewitt Ave. Marquette, Mich.	'14
†Longyear, Philip O., Mine Foreman, Anglo-Chilean Consolidated Nitrate Corp., c/o Anglo-Chilean Consolidated Nitrate Corp., Casilla 17, Tocopilla, Chile.	'23
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Lonsdale, John T., Geol., Prof., Dept. of Geology, Agricultural & Mech. College of Texas, College Station, Tex.	'25
Loe, W. W., V.P., Yunnan-Kotchin Tin Trading Co.....Kotchin, Yunnan, China.	'26
Look, Allen, North Carolina Flux Co.....East Laporte, N. C.	'23
Loomis, Edward E., Pres., Lehigh Valley Railroad....143 Liberty St., New York, N. Y.	'99
†Loomis, Newell C., Patino Mines & Enterprises Cons., Inc.....Llallagua, Bolivia.	'29
Loonam, Alfred C., Research Met., Guggenheim Bros., 3771 10th Ave. at 202nd St., New York, N. Y.	'25
Lopez, Alejandro, Min. & Civ. Engr., A. Lopez & Co., Ltd., Walter House, 418, Strand, London, W.C.2, England.	'16

Lopez, Victor M.....	320 Central Park West, New York, N. Y.	'28
†Lorain, Sinclair H., Min. Engr., Chichagoff Mines, Ltd.....	Chichagof, Alaska.	'17
Loram, George L. H., Geol., Min. Engr., Messrs. Gibbs & Co.....	Valparaiso, Chile.	'26
Loram, Sydney H., Cons. Min. Engr.....	Cochrane 885, Valparaiso, Chile.	'97
Lord, J. O., Met., Asst. Prof. of Met., Dept. of Met., Ohio State Univ., Columbus, Ohio.		'17
Lord, P. B., Supt., Santa Barbara Unit, Cia. Minera Asarco, S. A., Santa Barbara, Chih., Mexico.		'20
Lorenson, Carl Alvin, Min. Engr., Asst. Mine Supt., Bethlehem Chile Iron Mines Co., Tofo, La Higuera, Coquimbo, Chile.		'25
Lorenzen, Johnnie, Roustabout, Amerada Pet. Corp.....	Norman, Okla.	'27
Lorig, Clarence H.....	119 Stewart Ave., Lansdowne, Pa.	'24
Loring, W. J., Arizona Metals, Inc.....	Kirkland, Ariz.	'98
Loscailzo, David Andrew, Min. Engr., Raleigh Coal & Coke Co....	Box 405, Raleigh, W. Va.	'27
Lothrop, M. T., Asst. Mgr., Timken Roller Bearing Co.....	Canton, Ohio.	'18
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Lovejoy, Ellis, Cons. Engr.....	1538 N. High St., Columbus, Ohio.	'86
Lovejoy, John M., Min. Engr., Pres., Petroleum Bond & Share Corp., 39 Broadway, New York, N. Y.		'16
Lovelace, Manuel Burr, Shift Foreman, Morococha Concentrator, Cerro de Pasco Copper Corp., Morococha, Peru.		'27
†Lovell, Endicott R., Asst. Supt., Calumet & Hecla Smelt. Works.....	Hubbell, Mich.	'20
Loveman, Michael H., Min. Geol.....	Box 493, Joplin, Mo.	'19
Lovering, T. S., Asst. Geol., U. S. Geol. Survey.....	Golden, Colo.	'22
Low, Bela, Cons. Min. Engr.....	225 Broadway, New York, N. Y.	'30
Low, Charles R., Tacoma Smelter.....	Tacoma, Wash.	'24
Low, V. F. Stanley, Civ. & Min. Engr.....	7 Lothbury, London, E. C., England.	'01
Lowden, Hugh B., Met. Engr.....	1312 York St., Denver, Colo.	'15
†Lowry, E. J., Cons. Met.....	613 Fisher Bldg., Detroit, Mich.	'19
Lowzow, Odd.....	1711 W. 24th St., Milwaukee, Wis.	'27
Lloyd, R. W., Min. & Met. Engr., Grandview Mines, Inc.....	Metaline Falls, Wash.	'29
Lucas, Francis F., Bell Telephone Laboratories.....	463 West St., New York, N. Y.	'25
Luchsinger, Frederico, Min. & Met. Engr.; Gen'l Mgr.; Compañía Minera de Linares; Sociedad Española Grafitos Refinados; Compañía Minera Manchego Asturiana, Ayala 20, Madrid, Spain.		'29
Lucke, P. K., Cons. Min. Engr.....	Box 183, Sta. A, San Antonio, Tex.	'06
Lucky, Maurice C., Dist. Geol., Houston Oil Co. of Texas.....	Box 1417, Midland, Tex.	'27
Luerssen, George V., Met. Dept., The Carpenter Steel Co.....	Reading, Pa.	'15
Luetscher, Oliver P., Cons. & Contract. Engr. specializing in metal furnaces, Box 82, Peru, Ill.		'20
Luke, Russell P., Asst. Supt., Cia. Minera Asarco, S. A., Apt. 182, San Luis Potosi, S. L. P., Mexico.		'20
Lukens, Fred M., Sears Roebuck & Co.....	Arthington & Homan St., Chicago, Ill.	'25
Lukis, Ernest du Bois, Min. Engr., New York & Honduras Rosario Min. Co., San Juancito, Honduras, C. A.		'20
Lumaghi, O. L., Gen'l Supt., Lumaghi Coal Co.....	506 Olive St., St. Louis, Mo.	'17
Lund, Cecil N., Jr. Mine Engr., Braden Copper Co.....	Rancagua, Chile.	'28
†Lund, John T., Lead Mfr., Pres., Northwest Lead Co., 1744 Fourth Ave. S., Seattle, Wash.		'24
Lund, Karl G., Iggesunds Bruk.....	Iggesund, Sweden.	'27
Lund, Rupert E.....	855 W. 79th St., Los Angeles, Cal.	'24
Lundberg, Hans T. F., Gold Medallist, Swedish Engrg. Academy, Oct. 1925; Min. Engr., Mgr., Swedish American Prospecting Corp., 26 Beaver St., New York, N. Y.		'24
Lundberg, John, Jr., Min. Engr. & Geol.....	Box 369, Idaho Falls, Idaho.	'26
Lundberg, Sven, Min. Engr., Asst. Managing Dir., Reymersholms Gamla Industri Aktiebolag, Helsingborg, Sweden.		'21
Lundquist, E. H.....	841 N. 5th Ave., Phoenix, Ariz.	'17
Lundy, W. T., Min. Engr., Freeport Sulphur Co.....	Freeport, Tex.	'14
Lunt, Horace F.....	715 First National Bank Bldg., Denver, Colo.	'03
Luoma, John W., Student, Carnegie Inst. of Tech.....	Pittsburgh, Pa.	'28
Lupton, Charles T., Chief Geol., Plateau Oil Corp., Room 431, First National Bank Bldg., Denver, Colo.		'14
Lury, Alexander.....	215 W. 101st St., Apt. 7 D., New York, N. Y.	'25

# 92 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Lust, Harold W., Chem., Tacoma Smelter, American Smelt. & Refin. Co., Tacoma, Wash.	'25
Lustosa, Joaquim de A., Civ., Min. Engr., Rua Voluntarios da Patria, No. 98, Rio de Janeiro, Brazil.	'05
Luten, Daniel B., Bridge Engr., Pres., Luten Engrg. Co., 1056 Consolidated Bldg., Indianapolis, Ind.	'25
Luther, E. C., Cons. Min. Engr., Pres., Peerless Coal & Coke Co., 313 Thompson Bldg., Pottsville, Pa.	'06
Lutts, Carlton G., Met., Met. Lab., Boston Navy Yard.....	Boston, Mass. '18
Lutz, Walter S., Chief Colliery Engr., Marvinne Colliery, The Hudson Coal Co., North Main Ave., Scranton, Pa.	'21
Lyden, Joseph P., Min. Geol.....	314 Joplin National Bank Bldg., Joplin, Mo. '14
Lyle, David Alexander, Colonel, U. S. Army.....	St. Davids, Delaware Co., Pa. '88
Lyman, Frank, Mfr., Pres., The Low Moor Iron Co. of Va., 14 Wall St., New York, N. Y.	'77
Lyman, G. E., Gen'l Supt., Madison Coal Corp.....	Glen Carbon, Ill. '20
Lyman, R. H., Pres. & Mngng. Dir., Kirkland Townsite Gold Mines, Ltd., Cobalt, Ont., Canada.	'96
†Lynch, H. Grattan, Geol., Howe Sound Co.....	613 Mills Bldg., El Paso, Tex. '26
Lyne, H. S., Pet. Geol., Gen'l Mgr., South Australian Oil Wells Co., 31 Queen St., Melbourne, Vic., Australia.	'20
Lyon, D. A., Dir., Dept. of Min. & Met. Research, U. S. Bureau of Mines, Univ. of Utah, Salt Lake City, Utah.	'09
Lyon, E. W.....	803 Watson Bldg., Fairmont, W. Va. '21
Lyon, Frederick, V.P. in charge of operations, U. S. Smelt., Refin. & Min. Co., Room 900, 55 Congress St., Boston, Mass.	'14
Lyon, George J., Cons. Engr.....	217 Rittenhouse St., Washington, D. C. '14
†Lyon, Roger R.....	655 East Alder, Portland, Ore. '23
Lyon, Tom, Geol., International Smelt. Co., 818 Kearns Bldg., Salt Lake City, Utah.	'25
Lyons, D. J.....	843 E. Lee St., Tucson, Ariz. '25
†Lyons, Richard T., V.P., Skelly Oil Co.....	Box 2087, Tulsa, Okla. '20
Lytzen, W. W., Supt., Sierra Buttes Mine.....	Sierra City, Cal. '13
Mabrey, Ronald, Geol., H. L. Hollis, Cons. Min. Engr....	80 E. Jackson Blvd., Chicago, Ill. '27
MacArthur, A. E. ....	1016 Hillcrest Pl., H. S., Miami, Ariz. '19
Macaulay, R. M., The Cons. Min. & Smelt. Co. of Canada, Ltd., 706 Drummond Bldg., Montreal, Que., Canada.	'11
MacBain, James T., Asst. Wks. Mgr., Union Carbide Co.....	Niagara Falls, N. Y. '24
MacCarthy, J. Donald, Min. Engr., General Manganese Corp., 428 Murphy Bldg., Detroit, Mich.	'29
MacCarthy, Marion S., Cons. Engr., Chief Engr., North American Dev. Corp., First National Bank Bldg., Denver, Colo.	'12
MacCartney, John Calvin, Asst. Min. Engr., Luzerne Co., 310 2nd National Bank Bldg., Wilkes-Barre, Pa.	'24
MacCoy, Frederick, Min. Engr.....	1000 Euclid Ave., Berkeley, Cal. '14
Macdonald, Angus W., Supt., Dept. of Industrial Relations, British Empire Steel Corp., Ltd., Sydney, N. S., Canada.	'14
MacDonald, Bernard, Min. Engr.....	Box 447, Oceanside, Cal. '89
MacDonald, Donald F., Geol.....	16 Eastover Court, Louisville, Ky. '21
MacDonald, E. H., Min. Engr., Chief Geol., Land Dept., Northern Pacific Ry. Co., 508 Securities Bldg., Billings, Mont.	'17
†MacDonald, E. J., Acct., Loomis, Suffern & Fernald.....	50 Broad St., New York, N. Y. '24
MacDonald, H. J. C., Min. Engr.....	Instructed to hold everything. '25
†Macdonald, John A., Mine Mgr., Macdonald Co.....	Kelly, N. M. '28
MacDonald, W. T., Min. Engr., International Nickel Co.....	Copper Cliff, Ont., Canada. '01
†MacDonell, James Alfred, Cons. Pet. Geol.....	661 W. Market St., Lima, Ohio. '26
MacDougall, C. W., Asst. Prof. of Min., Lafayette College.....	Easton, Pa. '24
MacDowell, Charles H., Pres., Armour Fertilizer Works, Austin Bldg., 111 W. Jackson Blvd., Chicago, Ill.	'15
Mace, Clement H., Pres. & Gen'l Mgr., The Mace Co.....	2763 Blake St., Denver, Colo. '19
MacFadden, C. K., Pet. Engr., Dir., Colon Dev. Co., London, etc., 90 West St., New York, N. Y.	'25
Macfee, Robert.....	Mines de Villemagne, par Treves (Gard), France. '12
MacGillivray, A. D., Rep., Canadian Ingersoll-Rand Co., 950 Richards St., Vancouver, B. C., Canada.	'28
MacGinniss, John, Chairman of Board, Mine & Smelter Mgr., Livingston Mines Corp., Room 1239, 25 Broad St., New York, N. Y.	'25
MacGregor, Frank S., Gen'l Mgr., Acetate Process Dept., Du Pont Rayon Co., 2 Park Ave., New York, N. Y.	'16
Machamer, Jerome E.....	Room 540, Otis Bldg., Chicago, Ill. '28
MacHardy, A. C., Asst. Supt., Cerro Min. Dept., Cerro de Pasco Copper Corp., Cerro de Pasco, Peru.	'23

For explanation of symbols, see page 5.



MacIrvine, F. S., Cons. Engr.	264 Oak Ridge Ave., Summit, N. J.	'18
†MacIntosh, A. Norman, Michigan College of Min. & Tech.	Houghton, Mich.	'23
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†MacIsaac, Donald.	Address Wanted.	'16
Mack, Edward L., Cons. Chem. & Met., Douglaston Labs., Inc.	Douglaston, L. I., N. Y.	'23
MacKallor, D. C., Min. Engr.	c/o A. E. Bendelari, Picher, Okla.	'16
Mackay, Alexander Dudley, Tech. Instr., Launceston Tech. College.	Launceston, Tasmania.	'18
†Mackay, D. K., Pet. Geol.	Lockhart, Tex.	'22
MacKay, G. J., Prof. of Met., Queen's Univ.	Kingston, Ont., Canada.	'20
Mackay, Henry S., Cons. Engr.	Pacific Southwest Bldg., Pasadena, Cal.	'06
MacKay, Hugh, Geol.	408 Berryhill Bldg., Sapulpa, Okla.	'29
Mackay, Scott, Assoc. Prof., Dept. of Met., Univ. of Wisconsin.	Madison, Wis.	'25
†Mackenzie, A. G., Sec. & Treas., Utah Chapter American Min. Congress,	Kearns Bldg., Salt Lake City, Utah.	'21
Mackenzie, George C., Min. Engr., The Canadian Inst. of Min. & Met.,	923 Drummond Bldg., Montreal, Que., Canada.	'19
MacKenzie, J. D., Mgr., American Smelt. & Refin. Co.	East Helena, Mont.	'26
MacKenzie, James T., Met. & Chief Chem., American Cast Iron Pipe Co.,	Birmingham, Ala.	'24
MacKenzie, K. G., Cons. Chem., The Texas Co.	17 Battery Pl., New York, N. Y.	'15
Mackenzie, Thomas George, Min. Engr.	Apt. 8, C. Camargo, Chih., Mexico.	'20
MacKenzie, William J., V.P., Interstate Iron & Steel Co.,	104 South Michigan Ave., Chicago, Ill.	'25
Mackness, C. F., Cons. Electrical Engr.	28, Victoria St., Westminster, London, S.W.1, England.	'20
MacLellan, Donald D., Walker Min. Co.	Spring Garden, Plumas Co., Cal.	'21
MacLennan, F. W., Min. Engr., Gen'l Mgr., Miami Copper Co.	Miami, Ariz.	'04
MacLeod-Elliott, E., Min. Engr., Mgr., Rhodesia-Katanga Junction Railway & Mineral Co.,	Ltd., Kansanshi Mine, N. Rhodesia, Africa.	'22
MacLeod, James T., Asst. Supt., Open Hearth Dept., Homestead Steel Wks.,	Carnegie Steel Co., Munhall, Pa.	'20
†MacLeod, Norman A.	186 Berkeley St., Glasgow C.3, Scotland.	'28
MacMichael, H. R., Chief Engr., American Smelt. & Refin. Co.,	1212 Mills Bldg., El Paso, Tex.	'16
MacMillan, C. H., Met. Engr.	Limerick, Me.	'20
Macmillan, Kenneth, Min. Engr.	Casilla 44, Potosi, Bolivia.	'21
MacMillan, W. A. A., Gen'l Supt., Canadian Klondyke Min. Co.,	North West Corp., Ltd., Dawson, Y. T., Canada.	'21
MacNaughton, James, Min. Engr., Pres., Calumet & Hecla Consolidated Copper Co.,	Calumet, Mich.	'90
MacNichol, A. W., Min. Engr., MacNichol Co.	Pier 5, San Francisco, Cal.	'16
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MacRae, Duncan.	Edgewood Arsenal, Edgewood, Md.	'29
Macready, George A.	5425 Chesley Ave., Los Angeles, Cal.	'15
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†Madeira, Louis C., III., Asst. to Pres., Madeira Hill & Co.,	260 South Broad St., Philadelphia, Pa.	'21
Madel, H., Professor, Bergakademie.	Freiberg, Saxony.	'29
Madge, William C., Min. Engr., Gen'l Mgr., Basin Cataract Min. Co.	Basin, Mont.	'12
Madgwick, Thomas George, Office of Supervisory Min. Engr., Dept. of Interior,	Ottawa, Ont., Canada.	'22
Magee, James F., Min. Engr., Mine Supt., Tofo Mines, Bethlehem Chile Iron Mines Co.,	Coquimbo, Chile.	'13
Magee, John F., Management Engr., Alpha Portland Cement Co.	Easton, Pa.	'27
†Magis, Sigfred Fredrick, Open Hearth Met. & Asst. Supt. of No. 1 Open Hearth, Jones	& Laughlin Steel Corp., South Side Wks., Pittsburgh, Pa.	'26
Magoffin, Beriah, Jr., Min. Engr.	Deerwood, Minn.	'13
Magoun, J. W., Asst. Supt., Open-Hearth, Bethlehem Steel Co.	Steelton, Pa.	'19
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Maguire, Hugh J., Met.	Anaconda, Mont.	'17
Mahaffey, Birch O., Pres., Silurian Oil Co.	704 Shell Bldg., St. Louis, Mo.	'20
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# 94 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

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†Mahoney, George Campbell.....	1815 Tacoma Ave., Berkeley, Cal.	'29
Mahoney, J. N., Mgr. of Engrg., Sperry Gyroscope Co.....	Sperry Bldg., Brooklyn, N. Y.	'18
Mahood, G. Phillips, Min. Engr., Frog & Switch Sales Dept., Bethlehem Steel Co.,	Oliver Bldg., Pittsburgh, Pa.	'24
†Mahool, John Barry, Jr., Supt., Nickel Dept., Baltimore Copper Smelt. & Rolling Co.,	Highlandtown Branch P. O., Baltimore, Md.	'29
Maier, Charles G., Supervising Engr., Pacific Experiment Sta., U. S. Bureau of Mines,	Berkeley, Cal.	'24
Maier, Herman R., Engr. of Constr., Warner Bros.....	West 45th St., New York, N. Y.	'18
Maillot, Elmer E., Min. Engr., U. S. Smelt. Refin. & Min. Co.....	Fierro, N. M.	'24
Main, Alfred F. ....	Avenida Juarez 83, Mexico City, D. F., Mexico.	'02
Mains, William Whitridge, Sales Engr., Road Supply & Metal Co.....	Topeka, Kans.	'27
Mairs, Elwood Donald, Asst. Tech. Supervisor, Massena Wks., The United States Aluminum	Co., Box 38, Massena, N. Y.	'26
Maitland, Alexander F., Supt. of Mine, Maitland Mine, State Bank Bldg., Negaunee, Mich.		'21.
Maize, Earl R., First Aid Miner, U. S. Bureau of Mines, 4800 Forbes St., Pittsburgh, Pa.		'27
Makin, Harold B., Columbia Steel Corp.....	Provo, Utah.	'21
Makita, Tamaki, Min. Engr.....	43 Kitahigakubocho, Azabuku, Tokyo, Japan.	'00
Malcolm, Vincent T., Met. Engr., Chapman Valve Manufacturing Co.,	Indian Orchard, Mass.	'22
Malcolm-Sim, A. C. B., Lloyds Bank, Ltd.....	North St., Brighton, England.	'28
Maliaikin, S., Chief Geol., Geol. Committee; Prof., Univ. of Leningrad,	Was. Ostr. Szechory Prosp. F2B, Leningrad, U.S.S.R.	'28
†Malkovsky, Jaroslav A., Instructor, Colorado School of Mines.....	Golden, Colo.	'29
Maller, John W., Min. Engr., Mngng. Dir., Ingersoll-Rand (India), Ltd.,	15 Clive St., Calcutta, India.	'15
Mallett, G. S., Tech. Supervisor, Anaconda American Brass, Ltd.,	New Toronto, Ont., Canada.	'20
†Mallory, P. R., Pres., P. R. Mallory & Co. & Elkon Wks., Inc.,	350 Madison Ave., New York, N. Y.	'18
Maloit, Frank J., Min. Engr., Empire Zinc Co.....	Gilman, Colo.	'18
Malozemoff, Alexander, Min. & Met. Engr., G. Benenson Investing Co., Inc.,	165 Broadway, New York, N. Y.	'21
Mamet, Oscar, Civ. Engr. of Mines.....	10, Avenue Elisabeth, Tervueren, Belgium.	'21
Manahan, Robert F. ....	280 Boylston St., Boston, Mass.	'11
Mancha, Raymond, Mfr., Pres., Mancha Storage Battery Locomotive Co.,	1909 South Kingshighway Blvd., St. Louis, Mo.	'26
Mandelbaum, Malvin R., Chief Chem., The Gray Processes Corp.,	961 Frelinghuysen Ave., Newark, N. J.	'28
Mandell, Ambrose J. ....	44 Jewel St., Forest Hills, L. I., N. Y.	'17
Manderfield, E. A., Cia. Minera de Penoles, S. A.....	Avalos, Zac., Mexico.	'18
Manderfield, Nicholas H., Asst. Prof., Met. & Ore Dressing, Michigan College of Min. &	Tech., Houghton, Mich.	'27
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Mangam, W. D., Agent, W. A. Clark, Jr.....	Butte, Mont.	'14
†Mangold, John V. ....	c/o Chas. Setzkorn, Dairymen's State Bank, Arpin, Wis.	'21
Manley, Frank A., Cons. Min. Engr.....	724 Hinman Ave., Evanston, Ill.	'02
Manley, H. L., Min. Engr.....	916 West Ray St., Seattle, Wash.	'93
Mann, Horace T., Assoc. Prof., Pet. Engrg.,	Room 8-219, Mass. Inst. of Tech., Cambridge, Mass.	'16
Mannakee, Nathan H., Civ. & Min. Engr.....	Box 862, Bluefield, W. Va.	'08
Manners, E. A., 678-9 Salisbury House, 4th Floor, London Wall, London, E.C.2, England.		'01
Manning, E. Morgan, Asst. Met., Western Cartridge Co.....	East Alton, Ill.	'26
Manning, Edward.....	131 Wyoming St., Wilkes-Barre, Pa.	'22
Manning, R. I., Assoc. Min. Engr., U. S. Bureau of Mines.....	Salt Lake City, Utah.	'30
Manning, Van H., Pet. Engr., Petroleum Research Corp., 120 Broadway, New York, N. Y.		'14
Manning, William M., Cons. Engr.....	528 South Adams St., Spokane, Wash.	'22
Mansfield, George Rogers, Geol., U. S. Geological Survey.....	Washington, D. C.	'20
Mantell, Charles L., Cons. Chem. Engr., Pratt Inst.....	Brooklyn, N. Y.	'28
†Mapes, Clarel B., Technologist, Mid-Continent Oil & Gas Assoc.,	308 Tulsa Bldg., Tulsa, Okla.	'29
Maradudin, Alexei Peter, Shift Boss, Nevada Consolidated Copper Co.....	Ray, Ariz.	'27
Marble, E. R., Supt., El Paso Smelt. Wks.....	El Paso, Tex.	'17
Marble, R. N., Jr., The Western Mach. Co.....	Wichita, Kans.	'14
March, Albert T., Met. Engr., Western Electric Co.....	Hawthorne Sta., Chicago, Ill.	'16
†March, W. S., Jr., Chief Geol., Andes Copper Min. Co., Min. Dept., Chanaral, Chile.		'21
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For explanation of symbols, see page 5.

Margerum, C. E., Material Engr., U. S. Naval Gun Factory, Navy Yard, Washington, D. C.	'19
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Markle, Alvan.....	'85
Markle, Donald, Min. Engr., Pres., Jeddo-Highland Coal Co.....	'17
Markle, John, Retired.....	'79
Marks, Arthur, Met. & Foundry Consultant.....	'28
Marland, John, Gen'l Supt., King Harlan Co., 2407-08 Union Central Bldg., Cincinnati, Ohio.	'23
Marquand, A. B., Cia. de Real del Monte y Pachuca.....	'18
Marquardt, Ernest, Pet. Geol.....	'17
Marriner, J. T.....	'01
Marriott, A. D., Jr., Met. Engr., The Dorr Co.....	'15
Marriott, Hugh F., Cons. Engr.....	'05
Marsh, A. L., Gen'l Mgr., Hoskins Mfg. Co.....	'18
Marsh, Austin G., Engr., Colorado Fuel & Iron Co.....	'15
Marsh, George A.....	'25
Marsh, Harry W., Chem. & Geol., Tamarack & Custer Cons. Min. Co.....	'23
Marsh, K. H., British Empire Steel Corp.....	'12
Marsh, Richard, Assayer.....	'22
Marshall, Albert E.....	'05
Marshall, Cyrus Buxton.....	'16
Marshall, Ernest N., Crucible Fuel Co.....	'23
Marshall, Irvine Meredith, Gen'l Supt., Central Manitoba Mines, Ltd., Wadhope, Man., Canada.	'24
†Marshall, John S., Mech. Mine Foreman, South Penn. Collieries Co., Von Stouk Colliery, Scranton, Pa.	'22
Marshall, K. L., U. S. Bureau of Mines.....	'24
Marshall, Leslie H., Cons. Met.....	'27
Marshall, Newton C., Min. Engr.....	'20
Marshall, Stuart B., Cons. Engr. & Met.....	'14
Marshall, S. M., Cons. Engr., Partner, Perin & Marshall, 17th Floor, Salmon Tower Bldg., 11 W. 42nd St., New York, N. Y.	'10
†Marshall, Wilbur H., W. A. Marshall & Co.....	'07
Marsters, Vernon F.....	'26
Marston, John Rufus, Research Chem., United Verde Copper Co.....	'20
†Martignan, Pierre G., Cons. Engr.....	'28
Martin, E. D., V.P. & Gen'l Mgr., Emark Battery Corp.....	'24
Martin, F. O.....	'21
Martin, Fred P., Supt., Forge & Heat Treating Depts., Ingersoll-Rand Co., Phillipsburg, N. J.	'07
†Martin, J. Sheldon, Met. Engr., Pike & West.....	'20
†Martin, Jack Arthur, Min. Engr., Braden Copper Co.....	'27
†Martin, John N., Salesman, Pet. Industry, Allis-Chalmers Mfg. Co., 1515 Santa Fe Bldg., Dallas, Tex.	'26
†Martin, John S., Student, New Mexico School of Mines.....	'21
†Martin, John William.....	'27
Martin, O. C., Manager, Societe Generale Metallurgique de Hoboken, Hoboken Oolen, Belgium.	'26
Martin, Robert L., Block Dept., Pennsylvania Gypsum Co., Delaware Ave. & Jeffrey St., Chester, Pa.	'15
Martin, S. E., Engrg. Staff, Broken Hill Proprietary Co., Iron & Steel Works, Pt. Waratah, N. S. W., Australia.	'08
Martin, Tommy, Ingenieur des Arts et Manufactures, Societe Miniere et Metallurgique de Penarroya, Megrine, Tunia, Tunisia.	'17
†Martinez, A. J., Cons. Min. Engr.....	'20
Martinez, F. C.....	'23
Martius, Frederick T., Min. Engr.....	'16
Marty, Edgar O., V.P. & Gen'l Mgr., Sherman Coal Corp.....	'21
†Marvin, Theodore, Editor, <i>The Explosives Engineer</i> , Delaware Trust Bldg., Wilmington, Del.	'27
†Maschmeyer, William Louis, Tennessee Coal, Iron & Railroad Co., Box 276, R. F. D. 6, Bessemer, Ala.	'18
Mason, J. Gordon, Chile Exploration Co.....	'28
Mason, Russell T., Markwell & Co.....	'05
Mason, Shirley L., Cons. Oil Geol., Huntley & Huntley, 612 So. Aiken Ave., Pittsburgh, Pa.	'93
†Masson, Donald L., Min. Engr., Highland Surprise Min. Co.....	'23
Masters, Harris K., V.P. & Sec., Charles Hardy, Inc., 100 E. 42nd St., New York, N. Y.	'26
Masterson, Edward Charles, Field Supt., Phoenix Oil & Transport Co., c/o Soc. Unirea, Casuta Postala No. 1, Ploesti, Romania.	'95
Mateer, Thomas J., Cons. Engr., Combined Metals Reduction Co.....	'27
	'18



†Mateer, Warren D., Assoc. Prof., West Texas State Teachers College.....	Canyon, Tex.	'29
Mather, Cuthbert Clifford, Assoc. Min. Engr., U. S. Geol. Survey,	212 Customhouse, Denver, Colo.	'29
Mather, Kirtley F., Prof. of Geol., Harvard Univ.....	Cambridge, Mass.	'19
Mather, Samuel, Merchant.....	2000 Union Trust Bldg., Cleveland, Ohio.	'79
Mather, T. W., Nitrate Agencies, Ltd.....	Iquique, Chile.	'08
Mather, W. G., Pres., The Cleveland-Cliffs Iron Co.,	1460 Union Trust Bldg., Cleveland, Ohio.	'86
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Mathews, Edward Bennett, Prof. of Petrography, State Geol. of Maryland, etc., Johns Hopkins Univ., Baltimore, Md.		'18
Mathews, John A. Howe Memorial Lecturer 1925; Robert W. Hunt Metallist, A.I.M.E. 1928; Met., V.P., Crucible Steel Co. of America, 17 E. 42nd St., New York, N. Y.		'15
Mathews, P. L.....	122 E. 42nd St., New York, N. Y.	'19
Mathewson, C. H., Prof. of Met., Hammond Lab., Yale Univ.....	New Haven, Conn.	'18
Mathewson, E. P., Met.....	Box 55, University Sta., Tucson, Ariz.	'89
Mathez, Forrest.....	624 Newhouse Bldg., Salt Lake City, Utah.	'23
†Mathy, A. L.....	2422 Procter, Port Arthur, Tex.	'21
†Mathy, Cyril Patrick.....	Box 462, Franklin Park, Ill.	'26
†Mathy, P. T.....	Franklin Park, Ill.	'25
Matson, George C., Geol. & Oil Producer, Schermerhorn Oil Co.,	408 Cosden Bldg., Tulsa, Okla.	'18
Matson, H. T., Rhodesian Trust Selection, Ltd.....	N'Dola, N. Rhodesia, Africa.	'23
Matson, J. T., Gen'l Mgr., American Metal Co. of New Mexico.....	Tererro, N. M.	'19
†Matson, Robert Carl, Asst. Prof. Min. & Civ. Engrg., Michigan College of Min. & Tech.	Houghton, Mich.	'23
Matsubara, Seichi, Mitsubishi Min. Co.....	Marunouchi, Tokyo, Japan.	'20
Matsumoto, Yosaburo, Supt. of Blast Furnace, Mitsubishi Iron Wks.,	Kenjiho, Chosen (Korea).	'27
Matsumura, Shigeru, Dir., Kaho Min. Co.,	Kamihonami-Mura, Kaho-Gun, Fukuokaken, Japan.	'23
Matsuzawa, Dentaro, Gen'l Mgr., Producing Dept., Nippon Oil Co., Ltd.....	Tokyo, Japan.	'17
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†Mathews, Armstrong, Gen'l Supt., Consolidation Coal Co.....	Coalwood, W. Va.	'25
†Mathews, Charles H., Elec. Engr., Susquehanna Collieries Co.,	Miners Bank Bldg., Wilkes-Barre, Pa.	'24
†Mattson, Vernon L., Min. Engr., Norrie & Tower,	Room 1206, 15 W. 38th St., New York, N. Y.	'24
Mauch, John L., Anglo-Chilean Consolidated Nitrate Corp.....	120 Broadway, New York, N. Y.	'13
†Maurer, Richard B., Jr. Mine Engr., Braden Copper Co.....	Sewell, via Rancagua, Chile.	'26
†Maury, Jesse L., Asst. Mgr., Broadwater Consolidated Mines.....	Box 125, Neihart, Mont.	'25
†Maust, Ernest J., The Dorr Co.....	247 Park Ave., New York, N. Y.	'25
†Maverick, Phillip, Cons. Pet. Geol.....	Rust Bldg., San Angelo, Tex.	'18
†Mavor, Sam, Elec. Engr.....	9 Crown Gardens, Dowanhill, Glasgow, Scotland.	'11
†Maxey, Paul R., Mine Engr., American Rolling Mill Co.....	Nellis, Boone County, W. Va.	'26
†Maxson, W. L., Sales Engr., Min. Dept., Allis-Chalmers Mfg. Co.....	Milwaukee, Wis.	'15
†Maxwell, Allyn W., Banker, Stone, Webster & Blodget, Inc.....	120 Broadway, New York, N. Y.	'26
†Maxwell, Arthur B.....	409 El Dorado, Arcadia, Cal.	'19
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†Maxwell, Ross A., Student, Univ. of Oklahoma.....	440 Elm St., Norman, Okla.	'29
†Maxwell, W. A., Jr., Production Mgr., Colorado Fuel & Iron Co.....	Pueblo, Colo.	'25
†Maxwell, W. Bernard, Mill Supt., Granby Cons. Min. Smelt. & Power Co.,	Anyox, B. C., Canada.	'27
May, Albert E.....	37 Robin Rd., West Hartford, Conn.	'02
†May, Arthur R., Geol., Shell Co. of California.....	405 Habersfelde Bldg., Bakersfield, Cal.	'21
May, Jesse J.....	Address Wanted.	'01
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Mayeda, Takanori, Asst. Prof., Engrg. Dept., Tohoku Imperial Univ.....	Sendai, Japan.	'27
Mayer, Lucius W., Min. Engr., Rogers, Mayer & Bill,	12th Floor, 26 Beaver St., New York, N. Y.	'05
Maynard, Edward Arthur, Investigator, New Jersey Zinc Co.....	Palmerton, Pa.	'20
†Mayo, Arthur Donald, Student, Montana State School of Mines.....	Butte, Mont.	'27
†Mazany, Mark S., Smelt. Supt., Braden Copper Co.....	Rancagua, Chile.	'14
McAdam, D. J., Jr., Charles B. Dudley Metallist, A.S.T.M., June, 1927; Met., U. S. Naval Engrg. Experiment Sta., Annapolis, Md.		'18
McAfee, Dan S., The Dorr Co.....	Park-Lexington Bldg., 247 Park Ave., New York, N. Y.	'16
McAlarney, Harry M., Gen'l Mgr., Fairmont, W. Va. Gas Coal Co.....	Fairmont, W. Va.	'23
McAllen, J. L., Min. Engr.....	612 Harvard Ave. No., Seattle, Wash.	'12

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McAlpine, Earl H., Engr., Hailey-Ola Coal Co.....	Haileyville, Okla. '22
McAuliffe, Eugene, Pres., The Union Pacific Coal Co.....	Union Pacific Bldg., Omaha, Neb. '09
†McBrien, J., Asst. to Supt., Cia. Minera de Penoles.....	Campo Morado, Gro., Mexico. '23
McBride, W. G., Prof., Min. Engrg., McGill Univ.....	Mining Bldg., Montreal, Que., Canada. '06
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McCaffery, Richard S., Prof. of Met., Univ. of Wisconsin.....	Madison, Wis. '95
McCart, M. C.....	1825 19th St., N. W., Washington, D. C. '27
†McCall, Sumner T., V.P., American Manganese Steel Co.,	
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McCall, W. C., Civil & Min. Engr.....	Logan, W. Va. '22
McCallum, George G., Assayer, Cons. Min. & Smelt. Co.....	Trail, B. C., Canada. '27
McCallum, Jean.....	4013a Shreve Ave., St. Louis, Mo. '19
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McCanless, William A., Engr., Sales Dept., Yosemite Portland Cement Corp.....	Merced, Cal. '27
McCart, Robert, Jr., Min. Engr.....	223 Mills Bldg., El Paso, Tex. '09
McCarthy, Edward E., Yukon Gold Co.....	Ampang, Selangor, F. M. S. '20
McCarthy, Edward T., Cons. Min. Engr.,	
Friars House, 39/41, New Broad St., London, E. C. 2, England.	'97
McCarthy, James F., Pres. & Mgr., Hecla Min. Co.....	Wallace, Idaho. '09
McCarty, Frank L., Supt. of Mines, The Union Pacific Coal Co.....	Rock Springs, Wyo. '29
McCarty, William J., Millman, McCarty & Ewers Gold Min. Co.....	Fairbanks, Alaska. '27
McCaskey, J. A., Min. Engr.....	321 Felt Bldg., Salt Lake City, Utah. '04
McCasky, H. D., Retired.....	Bora Da Orchards, Central Point, Ore. '05
McCasland, Robert Wilson.....	Adena, Ohio. '20
McCaughey, William J., Prof. of Mineralogy, Ohio State Univ., Lord Hall, Columbus, Ohio.	'18
McCay, L. W., Prof., Inorg. Chem., Princeton University.....	Princeton, N. J. '85
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McCleary, Elmer T., V.P., Youngstown Sheet & Tube Co.....	Youngstown, Ohio. '14
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120 Broadway, New York, N. Y.	'29
McClelland, J. F., V.P., Chemical National Co.....	165 Broadway, New York, N. Y. '08
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McClure, David, University Club.....	San Francisco, Cal. '00
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McCollow, C. R., Mgr., Geol. & Land Depts., Pacific Western Oil Co.,	
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McCollows, M. R.....	151 W. Center St., Anaheim, Cal. '28
McCombe, John George, Min. Geol. & Field Engr., McCombe Bros. Prospecting Syndicate,	
Montreal, Que., Canada.	'28
McConnell, Charles M., Asst. Engr., The Moffat Coal Co.....	Oak Creek, Colo. '28
McConnell, Harold, Alaska Juneau Gold Min. Co.....	Juneau, Alaska. '26
McConnell, Robert E., Min. Engr., Broker, Foster, McConnell & Co.,	
14 Wall St., New York, N. Y.	'16
McCormick, D. Ford, Min. & Civ. Engr. Mgr., Cold Spring Min. Co.....	Ellard, Va. '20
McCormick, George E., V.P. & Asst. Gen'l Mgr., Cia. de Cobre Magistral Ameca, S. A.,	
Box 7, Ameca, Jal., Mexico.	'27
†McCormick, George P., Assayer, Lone Jack Mine.....	Glacier, Wash. '24
McCormick, Henry, Jr.....	Cameron Bldg., Harrisburg, Pa. '92
McCormick, Thomas F., Met., The United States Aluminum Co.....	Niagara Falls, N. Y. '27
McCormick, Vance C.....	Bergner Bldg., Harrisburg, Pa. '94
McCosh, A. K., Jr., Gartsherrie Iron Works.....	Coatbridge, Scotland. '11
McCourt, W. E., Geol., Prof. of Geol., Dean, Schools of Engrg. & Architecture, Washington	
Univ. St. Louis, Mo.	'06
McCoy, Alex. W., Marland Oil Co.....	Ponca City, Okla. '16
McCoy, C. E., Supervisor of Quality, American Roll. Mill Co.....	Ashland, Ky. '27
McCrane, O., Min. Engr., Resident Mgr., American Foundation Co.....	Nevada City, Cal. '18
McCreath, Andrew S., Chem.....	236 Liberty St., Harrisburg, Pa. '75
McCreath, Lesley, Chem., Member of Firm, Andrew S. McCreath & Son,	
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# 98 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

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McCullough, H. F., Haas & McCullough, Engrs.....1601 Chestnut St., Philadelphia, Pa.	'24
McCullough, Harold W., Engr., Field research work, Goodman Mfg. Co., Halsted St. & 48th Pl., Chicago, Ill.	'27
McCullough, William A., Mutual Gold Mines Co.....Ouray, Colo.	'22
McCurdy, E. S., Min. Engr., Utica Min. Co. & Treasure Min. Co., 576 Mills Bldg., San Francisco, Cal.	'17
McCurry, John A., Supt., Bernice Anthracite Coal Co.....Russellville, Ark.	'27
McCutchin, John A., Observer, Oklahoma Geol. Survey.....Norman, Okla.	'28
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McDermott, E. D., Min. Engr., Cons. Min. Engr., The Dene, Boro Green, Kent, England.	'17
McDermott, Walter, Min. Engr.....78 Coleman St., London, E.C.3, England.	'74
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McDonald, Alex. M., Geol., Anaconda Copper Min. Co., Geol. Dept., Hennessy Bldg., Butte, Mont.	'21
McDonald, Felix P. ....Box 39, Inspiration, Ariz.	'17
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McDonald, Jesse F., Mgr., Down Town Mines Co.....Leadville, Colo.	'18
McDonald, John A., Cons. Engr.....1625 Durango Ave., Los Angeles, Cal.	'26
McDonald, Philip B., Assoc. Prof., charge of English, College of Engrg., New York Univ., New York, N. Y.	'26
McDonald, Thomas, Gen'l Supt., Ohio Works and Furnaces & Niles Furnace, Carnegie Steel Co., Youngstown, Ohio.	'90
McDonnell, Harry E., Supt., Blast Furnace Dept., Weirton Steel Co.....Weirton, W. Va.	'17
McDonnold, Haydon Wilburn, Geol., Prairie Oil & Gas Co.....Box 243, Waynoka, Okla.	'26
McDougall, B. W. W., Cons. Min. Engr....519 7th St. E., North Vancouver, B. C., Canada.	'20
McDougall, Donald Hugh.....Birch Hill, Stellarton, N. S., Canada.	'19
McDowell, John S., Dir. of Research, Harbison-Walker Refractories Co., Farmers Bank Bldg., Pittsburgh, Pa.	'29
McDowell, Samson, The Hudson Coal Co.....Scranton, Pa.	'27
McElroy, D. L., Student, West Virginia Univ.....Morgantown, W. Va.	'26
McElroy, George E., Min. Engr., U. S. Bureau of Mines, Bin H, University Station, Tucson, Ariz.	'20
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McFadden, John U., Treas. & Engr., Black Lick Min. Co.....Box 366, Ebensburg, Pa.	'22
McFarland, David F., Prof. & Head of Dept. of Met., School of Mines & Met., Room 115, Old Min. Bldg., Pennsylvania State College, State College, Pa.	'18
McFarland, R. S., Pet. Geol., Sec. & Supt., Land & Geol. Depts., Twin-State Oil Co., Box 1501, Tulsa, Okla.	'20
McFarland, W. H. S., Min. Engr., Min. Supt., Fairbanks Exploration Co., Fairbanks, Alaska.	'19
McFarlane, Alexander, Asst. Gen'l Mgr., Chosen Syndicate, Ltd., Taiyudo, Chosen (Korea).	'17
McFarlane, George C., Chief Engr., The Moffat Coal Co.....Oak Creek, Colo.	'21
McGaw, Hugh D. ....907 Piedras St., El Paso, Tex.	'25
McGee, L. S., Safety Dir., West Virginia Dept. of Mines.....Fairmont, W. Va.	'24
McGhee, John S., Asst. Supt., Mines 7 & 8, The Island Creek Coal Co., Box 575, Holden, W. Va.	'26
McGill, William M., Asst. State Geol., Virginia Geological Survey.....University, Va.	'21
McGonigle, Fritz, Asst. Mine Foreman, South American Dev. Co., Box 655, Guayaquil, Ecuador.	'25
McGovern, Rudolph A., Min. & Pet. Engr., Room 553, 11 Broadway, New York, N. Y.	'15
McGrath, T. O. ....528 East 4th St., Tucson, Ariz.	'26
McGregor, A. G., Cons. Engr., Selection Trust Bldg., Mason's Ave., Coleman St., London, E.C.2, England.	'15
McHeffey, Charles M. ....Allendale, N. J.	'26

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McHugh, James M., Gen'l Supt., Coal Mines, Tennessee Coal, Iron & R.R. Co.,	Pratt City, Ala.	'24
McIlvain, Edward M., Engr.....	120 Broadway, New York, N. Y.	'86
McInerney, William I., Supt., Heat Treating & Cold Drawing Dept., Pittsburgh Crucible Steel Co., Midland, Pa.		'20
McIntosh, F. F., Prof. of Met., Carnegie Inst. of Tech.....	Schenley Park, Pittsburgh, Pa.	'25
McIntosh, Robert, Mill Supt., Calumet & Hecla Cons. Copper Co.....	Lake Linden, Mich.	'17
McIntyre, Edward E., Min. Engr.....	1602 Ocean Ave., Santa Monica, Cal.	'19
McKaig, W. Wallace.....	Cumberland, Md.	'19
McKanna, Edwin A., Geol.....	2033 West 7th St., Los Angeles, Cal.	'13
McKay, G. S., Gen'l Mgr., Pittsburgh & Veta Grande Min. Co.,	Apt. 7, Zacatecas, Zac., Mexico.	'19
McKay, Guy R., Pres. & Gen'l Mgr., Sphinx Min. Co.....	Park City, Utah.	'20
McKay, Harry S. ....	1002 California Ave., Santa Monica, Cal.	'19
McKay, Hood, Engr., Susquehanna Coal Co., 1002 Commercial Trust Bldg., Philadelphia, Pa.		'03
McKay, Richard V., Treas. & Gen'l Mgr., McFadden Coffee & Spice Co.,	145 West First St., Dubuque, Iowa.	'12
McKay, William Eshorne, Pres., New England Fuel & Transportation Co.,	250 Stuart St., Boston, Mass.	'28
McKechnie, B. E. ....	2378 Elm St., Denver, Colo.	'07
+McKechnie, D. C., Field Engr., Cons. Min. & Smelt. Co. of Canada,	Kimberley, B. C., Canada.	'20
McKee, Arthur G., Contr. & Cons. Engr., Pres., Arthur G. McKee & Co.,	2422 Euclid Ave., Cleveland, Ohio.	'12
McKee, H. Harper, Geol., Brokaw, Dixon, Garner & McKee, 120 Broadway, New York, N. Y.		'18
McKee, Walter S., Pres., Kensington Steel Co.....	505 Kensington Ave. Chicago, Ill.	'17
McKee, William Meek, Pres., W. M. McKee, Inc.....	1905 Oliver Bldg., Pittsburgh, Pa.	'20
McKeehan, L. W., Prof., Dir., Sloane Physics Lab., Yale Univ.....	New Haven, Conn.	'23
McKenna, W. J., Supt. of Concentrator, International Smelt. Co.....	Tooele, Utah.	'29
McKensey, Stanley, Colliery Supt., Hebburn, Ltd.....	Box 4, Weston, N. S. W., Australia.	'28
McKenzie, William Carlton, Jr., Efficiency Engr., Muscoda Office Tennessee Coal, Iron & R.R. Co., Bessemer, Ala.		'22
McKeown, Maurice R., Australasian Institute of Min. & Met.,	Collins Court, 370 Little Collins St., Melbourne, Vic., Australia.	'20
McKillop, John, c/o W. Muller, 69a Great Queen St., Kingsway, London, W. C., England.		'95
McKim, James, Asst. Mine Foreman, Pacific Coast Coal Co.....	Carbonado, Wash.	'21
McKinlay, James, Mech. Engr.....	633 Spadina Ave., Toronto, Ont., Canada.	'16
McKinlay, William B., Min. Engr., Assoc. Editor, Engrg. Index Service,	29 West 39th St., New York, N. Y.	'02
McKinley, Harold L., Student, Univ. of Idaho.....	Alpha Tau Omega, Moscow, Idaho.	'29
McKinley, Leonard, Student, University of Utah.....	Salt Lake City, Utah.	'29
McKinney, Paul E., Chem. & Met., Met. Engr., Bethlehem Steel Co.....	Bethlehem, Pa.	'18
McKinnis, Charles., Min. & Oil.....	1726 Standard Ave., Glendale, Cal.	'12
McKinstry, Hugh Exton, Geol., Hollinger Cons. Gold Mines, Ltd., Timmins, Ont., Canada.		'21
McKitterick, James J., Min. Engr., McKitterick Coal Co.....	Box 485, Jackson, Ohio.	'20
McKnight, Charles, Met. Charge Alloy Steel Dev., The International Nickel Co.,	67 Wall St., New York, N. Y.	'20
McKnight, H. S., Nichols Copper Co.....	Laurel Hill, L. I., N. Y.	'17
McLachlan, C. G., Concentrator Supt., Horne Copper Co.....	Noranda, Que., Canada.	'26
McLachlan, Daniel G. ....	Gilbert, Nev.	'19
McLain, David, Iron & Steel Fdry. Advisor, Pres. & Mgr., McLain's System, Inc.,	808 Goldsmith Bldg., Milwaukee, Wis.	'23
McLaine, W. L., Mgr. of Prod., General Pet. Corp., 1006 Higgins Bldg., Los Angeles, Cal.		'17
McLaughlin, Andrew Cyrus, V.P., Associated Oil Co.,	79 New Montgomery St., San Francisco, Cal.	'19
McLaughlin, Donald Hamilton, Prof. of Min. Engrg., Harvard Univ.,	Rotch Bldg., Cambridge, Mass.	'16
+McLaughlin, Dorsey E., Pres., Pacific Coast Steel Co.,	1312 Hunter-Dulin Bldg., San Francisco, Cal.	'20
McLaughlin, R. P., Pet. Engr. & Geol.....	850 Subway Terminal Bldg., Los Angeles, Cal.	'20
McLean, M. H., Mgr., Farm Bureau, The Valley Bank.....	Phoenix, Ariz.	'09
McLeish, John, Dir., Mines Branch, Dept. of Mines of Canada,	Mines Branch Bldg., Sussex St., Ottawa, Ont., Canada.	'22
McLellan, J. Orville, Student, South Dakota State School of Mines, Rapid City, S. D.		'29
McLeod, Angus, Mgr., Land & Geol. Dept., Central Div., Shell Pet. Corp.,	Dallas Athletic Club Bldg., Dallas, Tex.	'18
McMahan, Charles H. ....	1927 East Third St., Long Beach, Cal.	'95
McMahon, F. J., Mech. Engr., Mgr., McMahon & Cremins, Inc.....	Norwalk, Conn.	'11
McMahon, G. F., Chief Chem. & Met., Schweitzer & Conrad,	4431 Ravenswood Ave., Chicago, Ill.	'20
McMaster, A. T. C. ....	17 Lyall Ave., Toronto, 13, Ont., Canada.	'08

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McMeekin, Charles W., Min. Engr.....	2218 Roosevelt Ave., Berkeley, Cal.	'14
McMillan, A. J. ....	St. Andrews, Kenilworth, Warwickshire, England.	'08
McMillan, A. S., Pres., Edgar Zinc Co.....	Room 910, 314 North Broadway, St. Louis, Mo.	'20
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McMurrer, Patrick D., Engr., West Virginia Coal & Coke Co., Box 654, Omar, W. Va.		'26
McNab, A. J., Min. & Met. Engr., Pres., Mason Valley Mines Co.; V.P., Magma Copper	Co., 14 Wall St., New York, N. Y.	'16
McNabb, J. C., Met., Magma Copper Co.....	Superior, Ariz.	'15
†McNally, R. T., Production Engr.....	Box 37, Earlsboro, Okla.	'29
McNamee, Frank A., Sales, Jeffrey Mfg. Co.....	Columbus, Ohio.	'25
McNaughter, David W., Civ. Engr., Robert W. Hunt & Co.,	Monongahela Bank Bldg., Pittsburgh, Pa.	'96
McNeil, Clayton Thomas, Sales Engr., Fairbanks Morse & Co.,	501 West 21st St., Indianapolis, Ind.	'27
McNeil, Emerson D., Gen'l Supt., Iron Mines, The McKinney Steel Co.....	Bessemer, Mich.	'23
McNeil, S. W., Student, Virginia Polytechnic Inst.....	Blacksburg, Va.	'28
McNeill, Harry L., Sales Engr., Stearns Rogers Mfg. Co.....	Denver, Colo.	'24
McNeill, Ralph W., Westinghouse Electric & Mfg. Co.,	10 West First South St., Salt Lake City, Utah.	'20
McNeill, Walter F. ....	601 Maclean Bldg., Calgary, Alta., Canada.	'07
McNicholas, Frederick S., Min. Engr., Mine Supt., The Granby Cons. Min. Smelt. & Power	Co., Anyox, B. C., Canada.	'23
McNutt, V. H., Cons. Geol., Pet. & Potash.....	926-27 Milam Bldg., San Antonio, Tex.	'14
McPherson, James D., Gen'l Supt., Mexican Candelaria Co., S. A.,	Contra Estaca, Sin., Mexico.	'21
McQuatters, Arthur J., Cady Lumber Corp.....	Accidental Life Bldg., Albuquerque, N. M.	'16
McQueen, H. S., Asst. State Geol., Missouri Bureau of Geol. & Mines.....	Rolla, Mo.	'28
†McVittie, C. Archibald, Financial Statistician,	c/o Harold E. Talbott, Jr., 230 Park Ave., New York, N. Y.	'26
McWilliams, John R., Pet. Engr., Skelly Oil Co.....	Tulsa, Okla.	'26
Mead, Dexter Horace, Supervisor of Methods, Dallas Brass & Copper Co.,	6601 W. Grand Ave., Chicago, Ill.	'29
Mead, H. Lynwood, Mgr., American Cyanamid Co.....	Brewster, Fla.	'22
Mead, Roy G., Cons. Engr. & Geol.....	1220 C. C. Chapman Bldg., Los Angeles, Cal.	'27
Mead, W. J., Prof. of Geology, University of Wisconsin.....	Madison, Wis.	'16
Meade, Ray.....	2109 Ave. H, Ensley, Ala.	'27
Meagher, Edward, Min. Engr., Texas Gulf Sulphur Co., 75 East 45th St., New York, N. Y.		'20
Means, Alan H., Min. Geol. & Engr., American Smelt. & Refin. Co.....	Salt Lake City, Utah.	'13
Means, Ellison C., Pres., Means Realty Co.....	Second National Bank Bldg., Ashland, Ky.	'88
Means, John H., Cons. Geol. & Min. Engr.....	R. 2, Bennington, Ind.	'97
†Mebs, Erwin H., Met., Wheeling Mold & Foundry Co.....	Wheeling, W. Va.	'21
Mechesney, Charles A., Engr., Equitable Gas Co.; Pittsburgh & West Virginia Gas Co.,	485 Sixth Ave., Pittsburgh, Pa.	'17
Mee, Whitney P., Supt., Arkansas Valley Plant, American Smelt. & Refin. Co.,	Leadville, Colo.	'16
Meehan, Augustus F., Pres., Ross-Meehan Foundries.....	Chattanooga, Tenn.	'24
†Meenach, Harrison W., Asst. Sewage Engr.....	542 Co-City Bldg., Seattle, Wash.	'24
Megraw, Herbert A., Met. Engr., V.P., Corchera Internacional.....	Apt. 164, Seville, Spain.	'01
Meier, A. J., Rockwood Corp. of America.....	709 Security Bldg., St. Louis, Mo.	'14
Mein, William W. ....	Room 1443, 315 Montgomery St., San Francisco, Cal.	'00
Meissner, Carl A., U. S. Steel Corp.....	71 Broadway, New York, N. Y.	'18
Meissner, Clarence E., Dev. Engr., Chrome Steel Wks.....	Carteret, N. J.	'27
Mejia M., Alfonso, Engr., Cia. Colombiana de Tabaco.....	Cali, Colombia.	'21
Mekler, L. A., Combustion Engr., Universal Oil Products Co.,	310 South Michigan Ave., Chicago, Ill.	'29
Meland, Norman, Pet. Geol., Sec., Goldelline Oil Corp., Braniff Bldg., Oklahoma City, Okla.		'24
Meller, H. B., Bureau Chief, Bureau of Smoke Regulation, City of Pittsburgh,	683 City-County Bldg., Pittsburgh, Pa.	'10
†Mellish, A. H., Chem., c/o Tacoma Smelter.....	Tacoma, Wash.	'20
Meloon, Nathaniel W., V.P. & Gen'l Mgr., Buffalo Bronze Die Cast Corp.,	100 Arthur St., Buffalo, N. Y.	'24
Melville, F. Leopold, Field Mgr., Trinidad Lease Holds, Ltd.,	Point-A-Pierre, Trinidad, B. W. I.	'28
Melville, A. C., Chem. Engr., Bird Archer Co.....	Cobourg, Ont., Canada.	'24
Melville, A. G., Geol., Chanslor-Canfield Midway Oil Co.....	Box 753, Santa Fe Springs, Cal.	'27
Melvin, Byron H., Engr., Central Manitoba Mines, Ltd.....	Wadhope, Man., Canada.	'28
Memminger, C. G., Cons. Min. Engr.....	Oakland Rd., Asheville, N. C.	'12

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Menaglia, Victor A., Min. Engr., S. K. F. Industries,	1608 Benedum-Trees Bldg., Pittsburgh, Pa.	'21
Menardi, H. B.,	5327 Live Oak View Ave., Eagle Rock, Cal.	'17
Mendelsohn, Albert, Gen'l Mine Supt., Champion Mine, Copper Range Co., Painesdale, Mich.		'20
Mendenhall, Walter C., Chief Geol., U. S. Geol. Survey	Washington, D. C.	'13
Menefee, Arthur B., Min. Engr., The Radiore Co.,	1204 Hollingsworth Bldg., Los Angeles, Cal.	'11
Menke, John G., Oil Well Drilling Contractor & Operator,	222 Waggoner Bldg., Wichita Falls, Tex.	'21
Menke, William J., Asst. Supt., Shenango-Penn Mold Co.	Sharpville, Pa.	'28
Mennell, J. Leslie, Min. & Met. Engr.,	1012 Federal Bldg., 85 Richmond St. W., Toronto, Ont., Canada.	'20
Mennie, Thomas S., Mgr., Barton Mines	North Creek, Warren Co., N. Y.	'24
Menshih, Nicolaus N., Min. & Met. Engr., Illinois Steel Co., South Works	Chicago, Ill.	'24
Mentzel, Charles, Cons. Engr.	11 Broadway, New York, N. Y.	'09
Mercer, Harry T., Chief Min. Engr., Copper Range Consolidated Co.	Painesdale, Mich.	'05
Mercer, John W.	225 Broadway, New York, N. Y.	'97
Mercer, Robert Hugh, Surveyor & Student, D. L. Buckingham	Marshfield, Ore.	'23
Mercur, R. A., Jr., Supt., Open Hearth, John A. Roebing's Sons Co.	Roebing, N. J.	'17
Meredith, Carlton, Geol. & Engr.	4259 Bordeaux Ave., Dallas, Tex.	'18
Meredith, David O., Gen'l Supt., Electrolytic Zinc Co. of Australasia, Ltd.,	Box AA-B, G. P. O., Hobart, Tasmania.	'27
Meredith, William F., Pres., Titanium Alloy Mfg. Co. & Titanium Pigment Co.,	94 Fulton St., New York, N. Y.	'15
Merica, Paul D., James Douglas Medallist, A.I.M.E., 1929; Dir. of Research, International Nickel Co., 67 Wall St., New York, N. Y.		'18
Merlin, Robert, Engr., Société Minière et Metallurgique de Penarroya,	Penarroya, Cordoba, Spain.	'29
Merrett, W. H., Matthey Prize, Royal School of Mines, 1901; Asst. Prof. of Met., Royal School of Mines, London, S. W. 7, England.		'12
Merricks, Frank, Min. Engr.	5-6 Great Winchester St., London, E. C. 2, England.	'92
Merrill, Alden, Tech. Supervisor, Buffalo Branch, The American Brass Co.	Buffalo, N. Y.	'18
Merrill, Charles W., Asst. Mineral Economist, Bureau of Mines, Common Metals Div.,	Washington, D. C.	'24
Merrill, Charles W., James Douglas Medallist, A.I.M.E., 1924; Met. Engr., Pres., The Merrill Co., 343 Sansome St., San Francisco, Cal.		'92
Merrill, I. L.	826 N. Peninsula Dr., Daytona Beach, Fla.	'20
Merrill, Ira W., U. S. Bureau of Mines, Car 9	Salt Lake City, Utah.	'27
†Merrill, L. Kenneth, Met., Head, Process Engrg. Lab., National Carbon Co., Inc.,	Fostoria, Ohio.	'20
Merrill, M. E., Min. Engr.	Kennecott, Alaska.	'11
Merrill, Millard W., Supt., Silver Refinery, United States Metals Refin. Co.	Carteret, N. J.	'20
Merrill, Pomeroy C., Min. Engr., Ural Metal Min. Trust,	c/o Uralmet, Alapaevsk, Ural District, U.S.S.R.	'10
Merriman, Thurston C., Met., Seymour Mfg. Co.	Seymour, Conn.	'14
Merrin, Harold W., Asst. Min. Engr., General Land Office, Interior Dept.,	Room 616, Post Office Bldg., Portland, Ore.	'21
Merriss, M. H.	Room 1415, 225 Broadway, New York, N. Y.	'21
Merritt, Clarence G., Met., Crucible Steel Co. of America	Harrison, N. J.	'24
Merritt, Floyd C., Mgr., Elliott Core Drill Co.,	850 Subway Terminal Bldg., Los Angeles, Cal.	'18
Merritt, John W., Cons. Geol.	316 Atlas Bldg., Tulsa, Okla.	'20
Merritt, Roy W., Sec., The Caribbean Pet. Co.	12th Floor, 65 Broadway, New York, N. Y.	'29
†Merritt, William L., Supt., Connor Creek Extension Min. Co.	Home, Ore.	'20
Merryweather, Hubert, Bethlehem Steel Co.	Box 383, Santiago de Cuba, Cuba.	'16
Merten, William J., Met. Engr., Westinghouse Electric & Mfg. Co.	East Pittsburgh, Pa.	'20
†Mesloh, Karl, Bertha Mineral Co.	Austinville, Va.	'24
Mesney, R. J., Min. Engr. & Asst. Supt., Cerro de Pasco Copper Corp.,	Goyilarisquisga, Peru.	'28
†Messer, Lisle R., Geol. & Min. Engr., Old Dominion Corp.	Box 1327, Guerneville, Cal.	'29
†Messinger, Ferrand, Engr.	Venice Hotel, Venice, Fla.	'25
Messler, Eugene L., Pres., Eureka Fire Brick Wks.,	1507 1st National Bank Bldg., Pittsburgh, Pa.	'97
†Messmore, Harold E., Univ. of Kansas	1712 Alabama St., Lawrence, Kans.	'21
Messner, Martin C., Supt. of Concentration, Giesche Spolka Akcyjna	Katowice, Poland.	'29
Metcalfe, G. W., Met., Cons. Engr., U. S. Smelt. Refin. & Min. Co.,	1 State St., Boston, Mass.	'96
Metcalfe, Stephen Brownlow, Wire Rope Engr., American Steel & Wire Co.,	New Haven, Conn.	'23
Metscher, E. A., Min. Engr., Caracoles Tin Co. of Bolivia, Casilla 674, La Paz, Bolivia.		'27
Metz, Gilbert F., Div. Sales Engr., Hardinge Co., Inc.	York, Pa.	'17



Metzgar, L. H., Gen'l Supt., Alaska Juneau Gold Min. Co.....	Juneau, Alaska.	'26
Metzger, William G., Safety Engr., Hudson Coal Co.....	424 Wyoming Ave., Scranton, Pa.	'06
Mewhirter, Sydney A., Supt., Vermont Copper Co.....	South Strafford, Vt.	'17
†Meyer, D. W., Engr. with Ralph E. Davis.....	1710 Union Bank Bldg., Pittsburgh, Pa.	'20
Meyer, F. N., Tech. Supervisor, Waterbury Branch, American Brass Co., Waterbury, Conn.		'21
Meyer, John P., Pres., Algodore Mining Co.....	Room 1307, Chemical Bldg., St. Louis, Mo.	'17
†Meyerhoff, Howard A., Asst. Prof. of Geol., Smith College.....	Northampton, Mass.	'21
Meyerovitch, Joseph, c/o Syndicat Industriel pour le Commerce Extérieur,		
	33 Boulevard Haussmann, Paris, France.	'10
Meyers, William R., The Cleveland-Cliffs Iron Co.....	Ishpeming, Mich.	'12
Michejda, Wladyslaw J., Kopolvia Giesche Nikeszowiec.....	Gorny Slask, Poland.	'28
Middelkamp, Leroy L., Engr., Cinco Minas Co.....	Cinco Minas, Jal., Mexico.	'13
†Middleton, Burton L.....	Address Wanted.	'19
‖Milano, Leonard, Gas Engr., Peoples Gas, Light & Coke Co.,		
	3921 S. Wabash Ave., Chicago, Ill.	'26
Mildon, R. B., Civ., Min. Engr., Westinghouse Electric & Mfg. Co.....	Lester, Pa.	'05
†Milek, Andrew, Chief Geol., Mexican Sinclair Pet. Corp.,		
	Apt. 241, Tampico, Tamps., Mexico.	'20
‖Miles, Kirk L., Student, Lawrence College.....	124 N. Green Bay St., Appleton, Wis.	'28
‖Milisich, Chris F., Ingersoll-Rand Co.....	1620 Williamson Bldg., Cleveland, Ohio.	'23
Millar, C. R., The African Manganese Co., Ltd.....	Insuta, Gold Coast, W. Africa.	'25
†Millar, E. S., Fields Agent, Indo-Burma Pet. Co., Ltd., Box 132, Rangoon, Burma, India.		'27
†Millar, William B., Rhodesian Selection Trust, Ltd.....	N'Dola, N. Rhodesia, Africa.	'26
Millar, William D.....	5133 Holly Court, Fairfield, Ala.	'21
Millard, Frank W., Min. Engr.....	Ely, White Pine Co., Nev.	'03
Millard, William John.....	Room 801, Whitehall Bldg., 17 Battery Pl., New York, N. Y.	'12
Millen, J. D.....	Launceston, Tasmania.	'05
Miller, Archibald, Mine Supt., Loyalhanna Coal & Coke Co.....	Cairnbrook, Pa.	'24
Miller, Benjamin L., Prof., Geol., Lehigh University.....	Bethlehem, Pa.	'11
Miller, Charles L., V.P. & Gen'l Supt., The American Steel & Wire Co.,		
	828 Frick Bldg., Pittsburgh, Pa.	'93
Miller, D. I., Works Mgr., James B. Clow & Sons.....	Coshocton, Ohio.	'02
Miller, Donald G., Min. Engr.....	Room 2401, 551 5th Ave., New York, N. Y.	'14
‖Miller, Edward C., Flotation Operator, St. Joseph Lead Co.....	Hughesville, Mont.	'28
Miller, Emory T., Min. Engr.....	436 Passaic Ave., Passaic, N. J.	'03
Miller, Ernest B., Operating V.P., Davison Chemical Co.....	1100 Garrett Bldg., Baltimore, Md.	'19
‖Miller, Franklin, The Berwind-White Coal Min. Co.....	Windber, Pa.	'27
‖Miller, Fred A., Student, Franklin County Coal Co.....	Herrin, Ill.	'27
†Miller, Harold Hudson, Bethlehem Steel Co.....	Lackawanna, N. Y.	'21
Miller, Howard, Head of Testing Lab., General Electric Co.....	Fort Wayne, Ind.	'29
Miller, J. Charles, Pet. Engr., U. S. Geol. Survey.....	Washington, D. C.	'29
Miller, J. Edwin, Pres., Lewistown Culvert Co.,		
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†Miller, John Gaines, Safety Engr., Federal Min. & Smelt. Co.,		
	Box 187, Baxter Springs, Kans.	'20
†Miller, K. T., Colliery Engr., Hudson Coal Co.....	Scranton, Pa.	'27
Miller, Leland C., Met., Field Engr., Donner Steel Co., Inc.,		
	4-144 General Motors Bldg., Detroit, Mich.	'29
Miller, Leonard B.....	National City Bldg., Cleveland, Ohio.	'93
‖Miller, Raymond Martin, Asst. in Met., Sullivan Min. Co.....	Kellogg, Idaho.	'24
†Miller, Roy Francis, Chief Engr., Franklin Fluorspar Co.,		
	City National Bank Bldg., Paducah, Ky.	'24
Miller, Spencer.....	217 Turrell Ave., South Orange, N. J.	'90
Miller, S. P., Tech. Advisor, The Barrett Co.....	40 Rector St., New York, N. Y.	'28
‖Miller, Thomas H., U. S. Bureau of Mines, Univ. of Utah.....	Salt Lake City, Utah.	'25
Miller, W. D., Geol.....	942 Kennedy Bldg., Tulsa, Okla.	'27
Miller, Walter, Pet. Refiner, V.P., charge of Refin., Marland Refin. Co....	Ponca City, Okla.	'18
Miller, Walter B., Utilities Coal Corp., Inc.....	Wallins Creek, Ky.	'16
Miller, Wilber B., Met., Research Lab., Union Carbide & Carbon Research Laboratories, Inc., Thompson Ave. & Manley St., Long Island City, N. Y.		'20
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‖Millican, J. F., Met., Asst. Foreman, Consolidated Min. & Smelt. Co.....	Trail, B. C., Canada.	'24
Milligan, William E., Asst. Prof. of Met., Sheffield Scientific School, Yale Univ.,		
	New Haven, Conn.	'16
Millikan, C. V., Amerada Pet. Corp.....	Petroleum Bldg., Tulsa, Okla.	'20
Millikan, Carl E., Min. Engr., Chief Engr., The Mexican Corp., S. A.,		
	Fresnillo, Zac., Mexico.	'22
‖Milliken, Allan Cunningham, Reading Iron Co.....	3121 Navigation Blvd., Houston, Tex.	'25
Millington, William Parkes, Min. Engr.....	612 Markle Bank Bldg., Hazleton, Pa.	'19

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Mills, Carl E., Chief Mine Engr., United Verde Copper Co.....	Box 1462, Jerome, Ariz.	'22
†Mills, Edwin S., V.P. & Gen'l Mgr. of Sales, Illinois Steel Co.,	208 So. La Salle St., Chicago, Ill.	'19
Mills, Edwin W., Cons. Min. Engr., Mills & Manning, Inc.,	Hui Chang Bldgs., Rue Linevitch, Peking, China.	'04
Mills, H. F., Mgr., Mutual Coal Co.....	Box 405, Gallup, N. M.	'24
†Mills, Hiram F., Min. Geol., American Zinc Co. of Tennessee.....	Mascot, Tenn.	'28
Mills, Louis D., Met., The Merrill Co.....	343 Sansome St., San Francisco, Cal.	'01
Mills, R. F.....	595 Radcliffe Ave., Pacific Palisades, Cal.	'20
Mills, R. Van A., V.P. & Gen'l Mgr., Hudson's Bay Marland Oil Co., Ltd.,	410 McLeod Bldg., Edmonton, Alta., Canada.	'07
Milne, Morgan C., Gen'l Supt., Low Volatile Coal Co.....	Concho, W. Va.	'29
Milton, Maxwell C., Geol., Du Vax Moore Co.....	212 California St., San Francisco, Cal.	'07
Milward, Miles S., Cia. Minera Explotadora de Promontorio, S. A.,	Chinacates, Dgo., Mexico.	'14
Minard, Frederick H., Min. Engr.....	41 East 42nd St., New York, N. Y.	'97
†Miner, H. H., Pres., The Steel Supply Co.....	26-30 No. Curtis St., Chicago, Ill.	'24
Minister, Percy F., Min. Engr., Asst. Gen'l Mgr., East Butte Copper Min. Co.,	Butte, Mont.	'18
Minor, C. Edward, Tennessee Copper Co.....	Copperhill, Tenn.	'26
Mintrop, Ludger, Professor der Technischen Hochschule.....	Breslau, Germany.	'29
Misangyi, William, Prof., Technical Univ., I. Muegyetem.....	Budapest, Hungary.	'28
†Misener, Ray H., Hazel Mine.....	Van Horn, Tex.	'27
Miser, Hugh D., Geol., U. S. Geol. Survey.....	Washington, D. C.	'21
†Mish, E. H., V.P., The Detachable Bit Corp. of America.....	25 Broadway, New York, N. Y.	'27
Mishler, R. T., Min. Engr., Mgr., The Tigre Min. Co., S. A.,	El Tigre, Son., Mexico, via Douglas, Ariz.	'12
Mitchell, D. P., Min. Engr.....	3, Melbury Rd., Kensington, W. 14, London, England.	'97
†Mitchell, David R., Instr., Dept. of Min. Engrg., Univ. of Illinois,	212 Transportation Bldg., Urbana, Ill.	'27
Mitchell, Graham John.....	16 Colonial Mutual Bldg., Johannesburg, S. Africa.	'20
Mitchell, H. H. Sec. & Treas., General Crushed Stone Co.....	Drake Bldg., Easton, Pa.	'06
Mitchell, James Macdonald.....	9 Summit St., Flushing, L. I., N. Y.	'17
†Mitchell, Kingsley C., Geol., Standard Oil Co. of California,	Apt. 4, Puerto Mexico, Vera Cruz, Mexico.	'27
†Mitchell, Paul, Lawyer & Min.,	7 Calle Oriente No. 13, Guatemala, Guatemala, C. A., Via New Orleans.	'28
Mitchell, Pentecost, Gen'l Mgr., Oliver Iron Mining Co....	605 Wolvin Bldg., Duluth, Minn.	'97
Mitchell, Russell S., Supt., Pittsburgh Limestone Co.....	R. F. D. 2, East Brady, Pa.	'22
Mitchell, Walter L., Mgr., Tiffany & Co. Factory.....	Forest Hill, Newark, N. J.	'24
Mitchell, Walter M., Asst. Sales Mgr., Central Alloy Steel Corp.....	Massillon, Ohio.	'29
Mitchell-Roberts, J. F., Met. Engr., Oliver United Filters, Inc.,	Federal Reserve Bank Bldg., Sansome & Sacramento Sts., San Francisco, Cal.	'99
Mitke, Charles A., Cons. Min. Engr.....	614 W. Roosevelt St., Phoenix, Ariz.	'10
Mitsuda, Sakujiro, Min. Engr.....	1 Susugacho, Nipponbashi-ku, Tokyo, Japan.	'20
Mitsui, Takanaga, Auditor & Partner, Mitsui Min. Co., Ltd.,	1 Surugacho, Nihombashi-ku, Tokyo, Japan.	'21
Mitsunaga, Etsuichi, Supt. of Smelter, Ashio Copper Mines, Furukawa Min. Co.,	Tochigiken, Japan.	'24
Mitten, L. F., Mech. Engr.....	Shrine View Rd., Dallas, Pa.	'14
Mittendorf, C. O., Supt., Engineers Exploration Corp.....	Trona, Cal.	'26
Mitton, H. Eustace, Min. Engr., The Butterley Co., Ltd.,	Colliery Offices, Ironville, Nottingham, England.	'24
Mixner, A. F., The Silver Peak Mines, Ltd.....	Yerranderie, N. S. W., Australia.	'15
Mizen, Ben A.....	Address Wanted.	'15
Mochel, Norman L., Met. Engr., Westinghouse Electric & Manufacturing Co., South Philadelphia Works, Lester Station, Philadelphia, Pa.		'28
Modesitt, Carl L., Oil Operator.....	307 C. A. Johnson Bldg., Denver, Colo.	'21
Moeller, Franklin, Mgr., New York Office, Wellman Seaver-Morgan Co.,	30 Church St., New York, N. Y.	'14
†Moeller, R. E. ....	Box 91, Earlsboro, Okla.	'28
Moerk, Frank N., Chem. Engr., Municipal Disposal Co.....	1512 Walnut St., Philadelphia, Pa.	'21
Moffat, David D., Asst. Gen'l Mgr., Utah Copper Co.....	Box 1775, Salt Lake City, Utah.	'13
Moffett, Charles A., Pres., Alabama State Board of Administration,	State Capitol, Montgomery, Ala.	'09
Moffit, Fred H., Geol., U. S. Geological Survey.....	Washington, D. C.	'18
†Moffit, Robert C., Cons. Engr., Sec.-Treas., Fisher Engrg. Co.,	Dexter Horton Bldg., Seattle, Wash.	'20
†Mohney, Curtis G., Engr.....	R. F. D. 3, Box 66, Salem, Ore.	'22

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# 104 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

†Moiles, Earle D., Asst. Production Mgr., Merco Nordstrom Valve Co., Inc., 21 Joralemon St., Belleville, N. J.	'18
Moir, John, Geol. & Geophysicist, Atlantic Oil Producing Co., Dallas, Tex.	'29
Moisan, John J., Met., Baguio, Benguet, P. I.	'17
Moitra, M. N., 20 Chowringhee, Calcutta, India.	'25
Moldenke, Edel, Min. Engr., Supt., Canadian Gypsum Co., Windsor, N. S., Canada.	'20
Moldenke, Richard, Cons. Met., Watchung, N. J.	'98
†Moldenke, Richard, Jr., Watchung, N. J.	'22
Molengraaff, G. A. F., Prof. of Geol., Geol. Lab. & Museum, Technical University, Delft, Netherlands.	'14
Moll, C. D., The Mexican Light & Power Co., Ltd., Apt. 124 Bis., Mexico City, D. F., Mexico.	'28
Moller, Warden A., Min. Engr., Pei Piao Min. Co., Pei Piao, via Chinhhsien, Pekin-Mukden Ry., North China.	'06
Molyneux, Frank N., General Delivery, Lankershim, Cal.	'20
Monk, Thomas A., Jr., Civ. & Min. Engr., Paul R. Hostetter Co., Inc., Sumner St. & Western Maryland R.R., York, Pa.	'26
Monroe, Eugene Hubert, Engr., General Chem. Co., 40 Rector St., New York, N. Y.	'27
Monroe, William S., Pres., Sargent & Lundy, Inc., 1412 Edison Bldg., Chicago, Ill.	'24
Monson, Walter T., Cerro de Pasco Copper Corp., Oroya, Peru.	'26
Montague, Charles L., Asst. Gen'l Supt., Cananea Cons. Copper Co., S. A., Cananea, Son., Mexico.	'17
Monteith, Archie Leon, Supt. of Mines, New River & Pocahontas Cons. Coal Co., Kay Moor, W. Va.	'17
Montgomery, A., Min. Engr., Geol., 28 First Ave., Mt. Lawley, Perth, West Australia.	'94
†Montgomery, Clinton H., Certified Public Accountant, 310 Fourth National Bank Bldg., Wichita, Kan.	'28
Montgomery, W. B., Jr., Box 416, Bishop, Cal.	'16
Montgomery, W. J., Mine Ventilation Engr., Jeffrey Mfg. Co., Columbus, Ohio.	'26
Montijo H., Fernando, Ingeniero de Mines, Esq. NE Juarez y 6a., Cananea, Son., Mexico.	'24
Montoulieu, E. I., Min. Engr., Dept. of Public Works, Acueducto de Santiago de Cuba, Santiago, Cuba.	'14
†Moon, Charles A., Pet. Engr., The Turkish Pet. Co., Ltd., Bagdad, Irak.	'27
Moon, Ralph M., Sales Engr. & Dir., Ingersoll-Rand Co. of India, Ltd., Box 468, Bombay, India.	'20
Mooney, F. X., Met. Engr., Box 1261, Clarkdale, Ariz.	'28
Mooney, James D., Pres., General Motors Export Co., 1775 Broadway, New York, N. Y.	'12
Mooney, Luke, Instructed to hold everything.	'16
†Moore, Adrian, V.P., Rycade Oil Corp., 1101 Esperson Bldg., Houston, Tex.	'22
Moore, Austin Laing, Gen'l Mgr., Bessemer Brick Co., Clairton, Pa.	'20
Moore, Bertie H., Lecturer in Met., School of Mines, Kalgoorlie, West Australia.	'10
Moore, Carl F., V.P. & Cons. Engr., United States Smelt. Refin. & Min. Co., 1 State St., Boston, Mass.	'13
Moore, Edward W., Min. Engr., Federal Electric Co., 316 Commercial St., Room 502, Los Angeles, Cal.	'03
Moore, Elwood S., Prof. of Economic Geol., Min. Bldg., Univ. of Toronto, Toronto, Ont., Canada.	'15
Moore, F. Cushing, Cons. Min. Engr., 304 Standard Stock Exchange Bldg., Spokane, Wash.	'20
Moore, Fred Corner, Control Engr., Nevada Consolidated Copper Co., Ray, Ariz.	'28
Moore, George, Pres., Pure Water Service Corp., 50 McLean Ave., Yonkers, N. Y.	'93
Moore, George, Student, Univ. of Utah, School of Mines, Salt Lake City, Utah.	'29
Moore, Gilbert P., Cons. Geol., Room 545, 25 Broadway, New York, N. Y.	'21
†Moore, Harvey Adams, Independent Oil & Min. Operator, 253 West 73rd St., New York, N. Y.	'21
Moore, James E., Met., Benguet Cons. Min. Co., Baguio, Benguet, P. I.	'25
Moore, James L., Jr., Supt. of Mines, Britannia Min. & Smelt. Co., Ltd., Britannia Beach, B. C., Canada.	'22
Moore, James Power, Jr. Min. Engr., St. Joseph Lead Co., Rivermines, Mo.	'26
Moore, Marshall G., Retired, 340 Orchard St., Johnstown, Pa.	'86
Moore, Milton J., Chem. & Met., Warman Steel Casting Co., Los Angeles, Cal.	'27
Moore, Perry N., Cons. Engr., 1010 U. S. National Bank Bldg., Denver, Colo.	'18
Moore, Philip N., Cons. Min. Engr. & Geol., 805 Merchants-Laclede Bldg., St. Louis, Mo.	'74
Moore, R. R., Met., Wright Aeronautical Corp., Paterson, N. J.	'28
Moore, Ralph H., Gen'l Mgr., Bituminous Coal Mines, C. A. Hughes & Co., Portage, Pa.	'22
Moore, Richard B., Dean of Science & Head of Chemistry Dept., Purdue Univ., Lafayette, Ind.	'18
Moore, Roy W., Min. Engr., Gen'l Mgr., United Eastern Min. Co., 1206 Pacific Mutual Bldg., Los Angeles, Cal.	'20
Moore, S. B., 16 Elk Ave., Dover, N. J.	'17
Moore, Stanley R., Min. Engr., Wallace, Idaho.	'14
†Moore, Walter S., Asst. Supt., Elk River Coal & Lumber Co., Widen, W. Va.	'27

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Moore, Warner, Mining.....	Richmond, Va.	'05
Moore, William H., Asst. Engr., Susquehanna Collieries Co.....	Shamokin, Pa.	'28
Moore, Willis G., Min. Engr.....	1040 East Platte Ave., Colorado Springs, Colo.	'20
Moorthead, A. J., Pres. & Gen'l Mgr., Madison Coal Corp.....	910 Michigan Ave., Chicago, Ill.	'25
Moote, Truman P., Engr., Foster Oil Co.....	714 Atlas Life Bldg., Box 162, Tulsa, Okla.	'28
Morales, Guillermo Machado, Min. Engr. & Geol., Sociedad a San Francisco, 8 Altos, Avenida Oeste 91, Caracas, Venezuela.		'20
Moran, Ernest, Engr., Tulsa Lead & Zinc Co.....	Miami, Okla.	'26
Moran, Robert B., Geol. & Engr., 434 A. G. Bartlett Bldg., 215 W. Seventh St., Los Angeles, Cal.		'08
Morehead, F. H., Chief Engr., Walworth Co.....	Statler Bldg., Boston, Mass.	'28
Morel, Lawrence F., Min. Engr., San Luis Min. Co.....	Tayokita, Dgo., Mexico.	'20
Morfit, C. C., Cons. Engr., Partner, Stuart, James & Cooke, Inc., 17 Battery Pl., New York, N. Y.		'29
Morgan, Arthur E., Supt., Melcroft Coal Co.....	Coxton, Ky.	'21
Morgan, Charles G., Const. Engr., Supt., Morris Run Coal Min. Co.....	Morris Run, Pa.	'12
Morgan, Donald A., Min. Engr., Mayflower Mine.....	Silverton, Colo.	'26
Morgan, Earle Gibbon, Min. Engr., Georgia Kaolin Co.....	Dry Branch, Ga.	'20
Morgan, George D., Geol., Dixie Oil Co., Inc., 809 Frost National Bank Bldg., San Antonio, Tex.		'17
Morgan, Harry J., Met., Oil Well Core Drilling Co.....	215 West Seventh St., Los Angeles, Cal.	'15
Morgan, James W., Min. Engr., C. A. Hughes & Co.....	Portage, Pa.	'28
†Morgan, Jesse R., Dean of Faculty, Colorado School of Mines.....	Golden, Colo.	'29
Morgan, Thomas F., Chief Min. Engr., Madeira Hill Coal Min. Co.....	Philipsburg, Pa.	'19
Morganroth, Lee C., Pittsburgh Athletic Assn., Bigelow Blvd. & Fifth Ave., Pittsburgh, Pa.		'13
Morhous, Fred T., Student, Michigan College of Mines.....	Houghton, Mich.	'27
†Morley, James H., Supt., American Rutile Co.....	Roseland, Nelson Co., Va.	'22
Morley, Walter S., Asst. Prof., Met.....	Univ. of Cal., Hearst Mining Bldg., Berkeley, Cal.	'02
Morrell, Lester G., Min. Engr., Ventures, Ltd.....	Box 238, The Pas, Man., Canada.	'25
Morrill, Albert Harrison, Sales Engr., Morrill & Morrill, 30 Church St., New York, N. Y.		'22
†Morrill, Weston, General Electric Co.....	Pittsfield, Mass.	'27
†Morris, A. Ferd., Geol., Empire Gas & Fuel Co.....	Bartlesville, Okla.	'21
Morris, Alan, Research Engr., Bridgeport Brass Co.....	Bridgeport, Conn.	'23
Morris, Albert Wood, V.P. & Chief Research Engr., Wetherill-Morris Engrg. Co., Morris Bldg., Philadelphia, Pa.		'18
Morris, F. L., Min. Engr.....	1057 Monadnock Bldg., San Francisco, Cal.	'01
Morris, Francis T., U. S. Mineral Surveyor, Harper-Macdonald Co., 22 W. Granite St., Butte, Mont.		'25
Morris, Frank G., Gen'l Supt. of Coal Mines, Southern Dist., Republic Iron & Steel Co., Sayreton, Ala.		'10
Morris, Frederick K., Asst. Prof. of Structural Geol., Room 4-352, Mass. Inst. of Tech., Cambridge, Mass.		'21
Morris, Harry T., Met. Engr., Bethlehem Steel Co.....	Bethlehem, Pa.	'06
Morris, Henry C.....	1863 Columbia Rd., Washington, D. C.	'02
Morris, Horatio H., New Business Dept., United Engr. & Constructors, Inc., 112 N. Broad St., Philadelphia, Pa.		'21
Morris, James.....	35 Queen Victoria St., London, E. C., England.	'98
Morris, Lee McClure, Student, West Virginia Univ.....	Morgantown, W. Va.	'28
†Morris, Richard J.....	Church House, 12th & Walnut Sts., Philadelphia, Pa.	'92
Morris, Robert H., Min. Engr., Gen'l Mgr., The Gauley Mountain Coal Co., Ansted, W. Va.		'05
Morris, Walter J., Pres. & Gen'l Mgr., The National Fuse & Powder Co., 3801 Delgany St., Denver, Colo.		'26
Morris, William R., Min. & Constr. Engr.....	2103 N. 9th St., Boise, Idaho.	'21
Morrissey, George A., Chief Engr., American Coke & Chem. Co., 1502 Telephone Bldg., St. Louis, Mo.		'28
Morrison, A. Cressy, Sec., International Acetylene Association, 30 E. 42nd St., New York, N. Y.		'20
Morrison, Allan A., Assayer, Engr., Montana Idaho Mines Corp., Box 812, Helena, Mont.		'26
Morrison, Frank G., Supt., Illinois Powder Mfg. Co., 1652 Pierce Bldg., St. Louis, Mo.		'26
Morrison, H. A., Sales Engr., Oliver United Filters, Inc., 33 W. 42nd St., New York, N. Y.		'12
†Morrison, J. E.....	1173 Queen Anne Pl., Los Angeles, Cal.	'29
Morrison, Montford, Cons. Engr., Acme-International X-Ray Co., 711 W. Lake St., Chicago, Ill.		'20
Morrison, Richard C., Mgr., Primos Lead Co.....	Primos, Pa.	'18
Morrison, Thomas.....	Highland Bldg., East End, Pittsburgh, Pa.	'96
Morrison, William J., Supt., Toronto Municipal Farms.....	Langstaff, Ont., Canada.	'07
Morrow, Alex. E., Div. Engr., Woodward Iron Co.....	Woodward, Ala.	'29
Morrow, James Bain, Research Engr., Pittsburgh Coal Co., 1135 Oliver Bldg., Pittsburgh, Pa.		'28

Morrow, J. G., Met. Engr., Steel Company of Canada Ltd.....	Hamilton, Ont., Canada.	'20
Morrow, L. Wayne, Chief, Designing & Estimating Div., Morrow Mfg. Co.,	Wellston, Ohio.	'29
Morse, B. P., V.P., Tennessee Central Railway Co. & Gen'l Mgr., Nashville Industrial Corp.,	Nashville, Tenn.	'06
Morse, Charles W., Min. Engr., Concentrating Engr., Washoe Reduction Wks., Anaconda Copper Min. Co.,	Anaconda, Mont.	'17
Morse, George H., Min. Engr., Gen'l Supt., Northern Coal Mines, Republic Iron & Steel Co.,	1743 Oliver Bldg., Pittsburgh, Pa.	'12
Morse, H. W.....	Box 840, Stanford University, Cal.	'16
Morse, Philip S.....	157 Walnut St., Brookline, Mass.	'84
Morse, Roy Robert, Geol., Shell Co. of California,	429 Higgins Bldg., 2nd & Main Sts., Los Angeles, Cal.	'20
Morse, Willard S.....	526 Adelaide Dr., Santa Monica, Cal.	'92
Mortensen, Emil, Supt., Blast Furnace & Coke Works,	Oxelosunds Jarnverksaktiebolag, Oxelosund, Sweden.	'20
Motton, Roscoe B.....	666 Washington St., Denver, Colo.	'00
Mortsell, Knut W., Supt., The Vesterbotten Mines, Vesterbotten Min. Co., Kufsors, Sweden.		'21
Mosehauer, Edward, V.P., Metals Sales Corp.....	25 Broadway, New York, N. Y.	'25
Moses, F. G., c/o Library, National Aniline & Chemical Co.,	40 Rector St., New York, N. Y.	'16
Moses, Horace, Gen'l Supt., Gallup American Coal Co.....	Gamero, N. M.	'01
Mosman, P. A., Met.....	Room 5003, 233 Broadway, New York, N. Y.	'94
Mosonyi, Emil.....	Apt. Postal 111-Bis, Mexico City, D. F., Mexico.	'15
†Moss, Frank A., Geol.....	1221 Subway Terminal Bldg., Los Angeles, Cal.	'27
Mossom, Stuart, Geol., Ohio Oil Co.....	Box 1129, Shreveport, La.	'23
†Motok, George Thomas.....	332 Carnegie Inst. of Tech., Pittsburgh, Pa.	'26
†Mott, Garret, Pres., Pinto Valley Co.....	43 Cedar St., New York, N. Y.	'25
Mott, Leslie C., Min. Engr.....	2300 Pacific Ave., San Pedro, Los Angeles Co., Cal.	'17
Motter, W. D. B., Jr., Min. Engr., Asst. to V.P., The Chile Exploration Co.,	25 Broadway, New York, N. Y.	'07
Motz, Ralph L.....	Box 919, Bisbee, Ariz.	'23
Moubray, John M., Min. Engr.....	Chipoli, Shamva, Southern Rhodesia, S. Africa.	'06
Moulin, Gabriel F. A., Ingénieur civil des Mines.....	Hermance, Geneva, Switzerland.	'21
Moulton, H. G., Cons. Min. Engr.....	14 Wall St., New York, N. Y.	'03
Moulton, John C., Pacific Copper Co.....	Box 57, Lordsburg, N. M.	'16
Mower, Lowell Kendall, Asst. to head of Geophysical Dept., Shell Pet. Corp.,	Athletic Club Bldg., Dallas, Tex.	'29
†Moyer, George W., U. S. Gypsum Co.....	Alabaster, Mich.	'27
†Moyer, Paul R., Mine Captain, Bethlehem Mines Corp.....	Box 2, Cornwall, Pa.	'25
Moyer, W. Irwin, Geol., Fairfax.....	43rd & Locust Sts., Philadelphia, Pa.	'21
Mrazec, Ludovic, Prof., Univ. of Bucharest; Dir., Geol. Survey of Romania, Bucharest,	Romania.	'23
†Mrkvicka, Gustavus A., Asst. Sec. & Treas.....	Room 1501, 14 Wall St., New York, N. Y.	'29
Mudd, H. S.....	1206 Pacific Mutual Life Bldg., Los Angeles, Cal.	'17
Mueller, Frank, Chem. Engr.....	40 Rector St., New York, N. Y.	'23
Mueller, William A., Cons. Met. & Min. Engr., Prof. Non-Ferrous Met., Met. Dept.,	Ohio State Univ., Columbus, Ohio.	'20
Mueser, E. E., Cons. Geophysicist, Asst. Prof., Dept. of Physics, New York Univ.,	Washington Square, New York, N. Y.	'23
Muir, Downie Davidson, Jr.....	Box 1785, Salt Lake City, Utah.	'22
**Muir, J. Lawrence, Student in Geol., Univ. of Oklahoma.....	Norman, Okla.	'29
Muldaur, George Barton, Gen'l Agent, Underwriters Laboratories,	109 Leonard St., New York, N. Y.	'21
†Mull, Edgar K., Met., Rustless Iron Corp. of America.....	Baltimore, Md.	'19
†Mullen, Donald Harrington, Sampler, The Tintic Standard Min. Co.....	Dividend, Utah.	'21
†Muller, Charles J., Oliver Iron Min. Co.....	Wolvin Bldg., Duluth, Minn.	'23
†Mulliken, Albert Edgerton, Min. Engr., Bunker Hill & Sullivan Min. & Concentr. Co.,	Kellogg, Idaho.	'27
Mulock, Fred S., Engr., U. S. Smelt. Refin. & Min. Co.....	1 State St., Boston, Mass.	'21
†Munakata, Tameharu, Managing Dir., Munakata Min. & Trading Co.,	Azikawa-Kitadori 2 Chome, Konohanaku, Osaka, Japan.	'25
Munger, Charles H., Head, Iron Ore Min. Dept., Pickands, Mather & Co.,	2000 Union Trust Bldg., Cleveland, Ohio.	'04
†Munn, John Frederic.....	4444 Malden St., Chicago, Ill.	'26
Munoz, Ernest.....	Av. Holanda 401 Nunoa, Santiago, Chile.	'23
Munoz, Paul.....	7807 Winston Rd., Chestnut Hill, Philadelphia, Pa.	'13
Munro, A. C., Mill Supt., Britannia Min. & Smelt. Co., Britannia Beach, B. C., Canada.		'18
Munro, Charles H., Min. Engr.....	1109 Hobart Bldg., San Francisco, Cal.	'99
Munroe, Charles E., Chairman, Committee on Explosives Investigations, National Research Council,	1023 16th St., Washington, D. C.	'95

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# MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES 107

Munroe, Harold S., Min. Engr., Newmont Min. Corp.....	14 Wall St., New York, N. Y.	'12
Munroe, Henry S., Cons. Engr., Emeritus Prof. of Mining.....	Litchfield, Conn.	'72
Murakami, Kiichi, Mill Supt., The Sumitomo Besshi Copper Mine, Sobiraki, Niihama, Ehimeken, Japan.		'27
Murphy, George A., Supt., Spring Canyon Coal Co.....	Spring Canyon, Utah.	'25
Murphy, J. G., Dist. Mgr., Worthington Pump & Machinery Corp., 2424 Enterprise St., Los Angeles, Cal.		'28
†Murphy, Joseph S., Smelterman, Asst. Gen'l Foreman, Cerro de Pasco Copper Corp., Oroya, Peru.		'28
Murphy, Loyal Johnston, Gen'l Engr., Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.		'28
Murphy, Paul R., Geol., International Smelt. Co....	814 Kearns Bldg., Salt Lake City, Utah.	'28
Murphy, Thomas, Supt. of Mines, Roslyn Field, Northwestern Improvement Co., Roslyn, Wash.		'28
Murphy, Thomas D., Student, Missouri School of Mines.....	Rolla, Mo.	'28
Murray, Charles B., Partner, Crowell & Murray....	407 Perry Payne Bldg., Cleveland, Ohio.	'90
Murray, George H., Asst. Pet. Engr., Caribbean Pet. Co.....	Maracaibo, Venezuela.	'27
Murray, R. M., Gen'l Mgr., Mount Lyell Min. & Railway Co., Ltd..	Queenstown, Tasmania.	'27
Murrie, J. L., Cons. Engr.....	11 Broadway, New York, N. Y.	'19
Mushketov, Dmitri, Min. Engr., Prof. of Geol., Mining Inst., 21 linie, Was. O., Leningrad, U.S.S.R.		'28
Myers, Charles Ford, Met. Engr., Anglo-Chilean Cons. Nitrate Corp., Casilla 17, Tocopilla, Chile.		'27
Myers, Desaix B., Min. Engr., Asst. Chief Geol., Union Oil Co. of California, Union Oil Bldg., Los Angeles, Cal.		'08
Myers, John F., Mill Supt., Tennessee Copper & Chem. Co.....	Copperhill, Tenn.	'28
Myers, W. M., Service Engr., United States Gypsum Co.....	17 State St., New York, N. Y.	'25
Myhren, Arne J., Research Chem., The New Jersey Zinc Co. (of Pa.), Research Div., Palmerton, Pa.		'29
Mylius, L. A., Pet. Engr. & Geol.....	1711 Exchange National Bank Bldg., Tulsa, Okla.	'20
†Myners, Thomas F., Min. Engr., Witherbee, Sherman & Co.....	Mineville, N. Y.	'21
†Myrin, H. A. W., Pres., "Rio Atuel" Ltda., S. A., Minera e Industrial, El Sosneado, Prov. de Mendoza, Argentina.		'26
Nabeshima, Tomotoshi, Min. Engr., Mgr., Min. Dept., Kenjiho Wks., Mitsubishi Iron & Steel Co., Kenjiho, Kokaido, Chosen (Korea).		'19
Naething, Foster S., Cons. Min. Engr.....	74 Trinity Pl., New York, N. Y.	'09
Nagazumi, Junjiro, Prof. of Min.....	Kiushu Imperial Univ., Fukuokaken, Japan.	'15
Nagel, Theodore, Engr.....	50 Orange St., Brooklyn, N. Y.	'21
Nagao, Takeo, Imperial Japanese Army, 1775 Broadway, General Motors Bldg, New York, N. Y.		'29
Naito, Hisahiro, Retired, Supreme Advisor, Nippon Oil Co., Ltd., Marunouchi, Tokyo, Japan.		'11
Nakagawa, S., Min. Engr.....	No. 26, Nando-Machi, Ushigome, Tokyo, Japan.	'16
Nakai, Shiro, Dir., Mitsui Min. Co.....	1 Surugacho Nihonbashi, Tokyo, Japan.	'23
Nakane, Hajime, Engr., Engrg. Depts., Mitsui Tagawa Colliery, Gotoji, Tagawa-gun, Fukuokaken, Japan.		'23
Nakaye, Seizo, Nakaye & Co.....	2 S. Imabashi 2 Chome, Higashi-kaw, Osaka City, Japan.	'18
Nalen, J. Leo, Constr. Engr.....	8 Grosbeak Rd., Bryn Mawr, Yonkers, N. Y.	'20
Naramore, Chester, Pettigrew & Meyer, Inc.....	120 Broadway, New York, N. Y.	'17
Nash, Howard F.....	Polson, Mont.	'18
Nash, Willard H., Engr.....	59 St. James Pl., Buffalo, N. Y.	'14
†Nass, Chester V., Supt., Brass Foundry, Fairbanks, Morse & Co.....	Beloit, Wis.	'25
**Naudin, Leo V., Jr. Met., San Francisco Mines of Mexico, Ltd., San Francisco del Oro, Chih., Mexico.		'29
Nead, John Hunter, Chief Met., The American Rolling Mill Co.....	Middletown, Ohio.	'19
Neal, Charles A., Mgr., Domado Lead & Zinc Co.....	Miami, Okla.	'27
Neal, Earl S., Geol., Lago Pet. Corp.....	Maracaibo, Venezuela.	'26
Neal, Homer C., New Verde Mines Co.....	Apt. 3037, Miraflores, Peru.	'19
†Neal, Will. M., Pres., Neal Min. Co.....	Yuma, Ariz.	'24
Neale, Arthur, Min. Engr.....	198 W. Prospect Ave., Pittsburgh, Pa.	'27
Neale, James B., Pres., Buck Run Coal Co.....	Buck Run, Pa.	'04
Neale, Laurance L., Sales Mgr., Atlantic Gypsum Products Co., Inc., 40 Rector St., New York, N. Y.		'14
Neale, Milton M., Supt., Donora Zinc Works, American Steel & Wire Co., Donora, Pa.		'30
†Neale, Walter Garfield, Mgr., Statistical & Research Dept., Wertheim & Co., 57 William St., New York, N. Y.		'27
Nealey, J. Barton, Director, Industrial Publicity, American Gas Assoc., 420 Lexington Ave., New York, N. Y.		'21
Neel, Carr B.....	1250 University Ave., Palo Alto, Cal.	'03

For explanation of symbols, see page 5.



# 108 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Neelands, Abram Rupert, Mngng. Dir., Francois Cementation Co., Ltd., Bentley Works, Doncaster, England.	'21
Negru, Jacques S., Min. Engr., International Nickel Co., 67 Wall St., New York, N. Y.	'18
Neill, James Wilson, Min. & Met. Engr.....	'79
Neill, R. B., Chem., St. Joseph Lead Co.....	'23
+Neill, Reginald K.....	'21
Neill, William L.....	'86
Neilson, Winthrop C.....	'06
Neiman, F. J., Pres., Syncline Contracting Co.....	'18
+Nelson, Archie A.....	'27
+Nelson, Arthur N., Met., Tech. Investigation Dept., American Smelt. & Refin. Co., Perth Amboy, N. J.	'26
+Nelson, Charles W., Sales Engr. (Rock Drill Sales Dept.), Ingersoll-Rand Co., 11 Broadway, New York, N. Y.	'22
**Nelson, Elwood B., Coal Washer Engr., Edgewater Mines, Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.	'29
Nelson, F. U.....	'20
Nelson, Hans A., Asst. Supt., New Cornelia Copper Co.....	'20
+Nelson, Jack Houk, Student, Texas College of Mines.....	'27
Nelson, John H., Met. & Research Engr., Wyman-Gordon Co., 105 Madison St., Worcester, Mass.	'19
Nelson, Ned E., Min. Engr. & Geol., Granby Cons. Min., Smelt. & Power Co., Ltd., Copper Mountain, B. C., Canada.	'19
+Nelson, P. H., Pres., Nelson Min. Co.....	'28
Nelson, Tom Holland, Steel Mfr., Chrome Alloy Products, Inc.....	'28
Nelson, W. I., Gen'l Supt., Engels Copper Min. Co.....	'16
Nelson, Wilbur A., Econ. Geol., Head, Schools of Geol., Univ. of Virginia, University, Va.	'17
+Nesbitt, Robert W., Chem., Anaconda Copper Min. Co.....	'26
+Netzband, William F., Min. Geol.....	'19
+Neuenschwander, Paul W., Treas., Wiser Oil Co. & Pet. Exploration, Thistle Bldg., Sistersville, W. Va.	'21
Neuffer, Carl W. F., Cons. Engr., Pennsylvania Coal Co.....	'29
+Neuhaus, Charles Ernest, Pet. Engr., Shell Oil Co.....	'28
Neuhaus, Heinrich.....	'29
+Neukumet, William, Civ., Mech. & Metal Min. Engr., City Hall Station, Box 716, New York, N. Y.	'23
Neumann, L. Murray, Geol., The Carter Oil Co.....	'18
Neustaedter, Harold Arthur, Chief Engr., Desloge Cons. Lead Co.....	'27
Nevin, Charles Merrick, Asst. Prof., Geol. Dept., Cornell Univ.....	'27
Nevitt, George Cornes, Min. Engr., The Cyprus Sulphur & Copper Co., Ltd., Lymni, Polis, Paphos, Cyprus.	'20
Nevius, J. Nelson, Min. Engr.....	'20
Newbaker, E. J., Gen'l Mgr., The Berwind-White Coal Min. Co.....	'12
Newberry, Andrew W., Min. Engr.....	'09
+Newberry, R. W., Bucyrus-Erie Co., Ltd., Windsor House, 83 Kingsway, London, W.C.2, England.	'09
+Newbold, Eric.....	'21
Newby, Jerry B.....	'27
Newcomb, Clive W.....	'19
Newell, A. T., Supt., Acid Dept., United Zinc Smelt. Corp....	'14
Newhall, Henry B., Pres., Henry B. Newhall Corp.....	'12
Newhall, P. M., Gen'l Mgr., North Venezuelan Pet. Co., Ltd., c/o Boulton & Co., Puerto Cabello, Venezuela.	'16
Newhouse, Walter H., Asst. Prof. Economic Geol., Mass. Inst. of Tech., Room 4348, Cambridge, Mass.	'20
Newland, David H., Min. Geol.....	'05
+Newlin, J. Mennert.....	'29
Newman, D. F., Min. Engr., Factory Mgr., Trans-Lux Daylight Picture Screen Corp., 253 Washington St., Brooklyn, N. Y.	'18
Newman, Elmer K., Min. Engr., Wisconsin Steel Co.....	'29
+Newman, George H., Min. Engr., San Francisco Mines of Mexico, Ltd., San Francisco del Oro, Chih., Mexico.	'27
+Newman, Lewis D., Mgr., Great Northern Iron Ore Properties, Room 205, 344 Jackson St., St. Paul, Minn.	'21
Newman, M. A., Min. Engr.....	'01
Newman, M. H., Geol.....	'15
Newnam, W. E., Supt., St. Louis Smelt. & Refin. Co.....	'15
Newport, Glenn Hubert, Director, Syndicate Minière du Ruanda-Urundi, Kabale, Uganda, British East Africa, Via Mombassa.	'23

For explanation of symbols, see page 5.

Newsom, J. B., Min. Engr., Bloomington Limestone Co.....	Bloomington, Ind.	'21
Newton, Charles E.....	Colliersville, Otsego Co., N. Y.	'21
Newton, Charles W., Gen'l Mgr., Callahan Zinc-Lead Co.....	Wallace, Idaho.	'16
Newton, F. C.....	334 Lake Ave., Greenwich, Conn.	'14
Newton, George C., Cons. Engr., Elwin F. Brown & George C. Newton, First National Bank Bldg., Iron Mountain, Mich.		'24
Newton, John, Gen'l Supt., Okla. Mines, Commerce Min. & Royalty Co., Box D, Cardin, Okla.		'21
Newton, Peter A., Gen'l Supt., South Works, Illinois Steel Co.....	S. Chicago, Ill.	'10
Ng, Sydney See Ho, Engr. of Mines, Lok Cheung Coal Min. Co., 26 Des Voeux Rd., Hong Kong, China.		'17
Nibecker, Karl, V.P., Imperial Type Metal Co., 1800 S. 54th Ave., Cicero, Chicago, Ill.		'14
Nichol, Thomas, Civ. & Min. Engr.....	1300 Kanawha St., Charleston, W. Va.	'96
Nicholls, J. C., Min. Engr., Gen'l Mgr., The International Nickel Co. of Canada, Ltd., Copper Cliff, Ont., Canada.		'06
Nicholls, William James, Asst. Copper Plant Supt., International Smelt. Co., 493 No. Main St., Tooele, Utah.		'29
Nichols, C. R., Pet. Geol., The Sun Oil Co.....	Dallas, Tex.	'26
Nichols, C. Walter, Pres., Nichols Copper Co.....	25 Broad St., New York, N. Y.	'28
Nichols, Ernest H., Chief Engr., The Funkhouser Co., 501 First National Bank Bldg., Hagerstown, Md.		'25
Nichols, H. W., Asst. Curator of Geol., The Field Museum of Natural History, Grant Park, Chicago, Ill.		'00
Nichols, J. Clayton, Pres. & Gen'l Mgr., Toledo-Cebu Coal Mines, Inc., Box 389, Cebu, P. I.		'95
Nicholson, Francis, Cons. Min. Engr., Lloyds Bank, Ltd., 35 Piccadilly, London, W.1, England.		'80
Nicholson, Hugh P., Instructor, Dept. of Min. Engrg., Univ. of Illinois, 211 Transportation Bldg., Urbana, Ill.		'29
†Nicholson, Martin, Min. Accountant.....	2903 W. Boone Ave., Spokane, Wash.	'28
†Nicholson, S. T., Pres. & Gen'l Mgr., Vulcan Iron Works.....	Wilkes-Barre, Pa.	'11
Nickel, Walter Frederick, Designing Engr., George A. Knese.....	Redwood City, Cal.	'29
Nickerson, Chauncey Maynard, Pet. Engr., U. S. Navy Dept., Room 401, 355 South Broadway, Los Angeles, Cal.		'28
Nicola, Oliver P., Jr., Scout, Gypsy Oil Co.....	Box 795, Ponca City, Okla.	'23
Niconoff, Dimitry, Research Met., United Verde Copper Co.....	Clarkdale Ariz.	'26
Nieding, Burton B., Min. Engr.....	2128 Hamlin St., Seattle, Wash.	'06
Nielsen, Otto, Mgr., Hirsch, Kupfer & Messingwerke, A. G., Kupferwerk, Ilsenburg, Germany.		'26
Niemi, William J., Fairbanks Exploration Co.....	Fairbanks, Alaska.	'26
Nighman, C. E.....	Giesche Spolka Akcyjna, Katowice, Poland.	'11
Nightingale, William T., Charge of Geol. Dept., Mountain Fuel Supply Co., Rock Springs, Wyo.		'21
Niiyama, Toshisuke, Gen'l Mgr. & Min. Engr., The Fujita Kogyo Kabushiki Kaisha, Ltd., Dojima, Osaka, Japan.		'21
Nisbet, John M., Asst. Chief Geol., Empire Oil & Refin. Co.....	Bartlesville, Okla.	'21
Nishihara, Hironao, Mgr., Andrews & George Co., No. 26 Tosamachi, Dairen, Manchuria, China.		'15
Nishimura, K., Nikko Copper Works, Furukawa Electric Co.....	Nikko, Japan.	'23
Nishimura, K., Kamaishi Mine.....	Kamaishi Machi, Iwateken, Japan.	'11
Nishio, Keijiro.....	51 Sendagi-Cho, Hongo-Ku, Tokyo, Japan.	'00
Nitchie, Charles C., Research Chem., The New Jersey Zinc Co.....	Palmerton, Pa.	'16
†Noble, Earl B., Div. Geol., Union Oil Co.....	514 Union Oil Bldg., Los Angeles, Cal.	'19
Noble, Gilbert Wright.....	c/o J. F. Noble, 6917 Princeton Ave., St. Louis, Mo.	'25
Noble, Louis S., Min. Engr.....	932 Equitable Bldg., Denver, Colo.	'89
Noble, William David.....	Box 687, San Juan, Porto Rico.	'21
Nobs, Frederick William, Gen'l Mgr., Empire Mines.....	Grass Valley, Cal.	'22
Nock, Walter John.....	566 Ave. Chapultepec, Mexico City, D. F., Mexico.	'28
Noda, Seijiro, Mngng. Director, Aso & Co., Ltd.....	Iizukamachi, Fukuokaken, Japan.	'20
Noe, A. C., Assoc. Prof., Dept. of Geol., Univ. of Chicago.....	Chicago, Ill.	'23
Noel, William H.....	Harlan, Ky.	'22
†Nogues, Albert.....	5, Avenue de Ségur, Paris (7 <sup>e</sup> ) France.	'23
Nolan, Philip E., Venezuela Gulf Oil Co.....	Maracaibo, Venezuela.	'17
†Nolan, Thomas B., Asst. Geol., U. S. Geol. Survey.....	Washington, D. C.	'26
Nold, F. B., District Supt., Lehigh Coal & Navigation Co.....	Lansford, Pa.	'08
Nold, Harry E., Prof. of Min. Engrg., Lord Hall, Ohio State Univ.....	Columbus, Ohio.	'14
Noll, Carl Vincent.....	85 Chestnut St., Brooklyn, N. Y.	'27
Norcross, Fred Stephenson, Jr., Asst. Gen'l Mgr., Cia. Minera de Penoles, S. A., Apt. 251, Monterrey, N. L., Mexico.		'14
Norden, Joseph A., Mgr., Utah Apex Min. Co.....	Bingham Canyon, Utah.	'25
Nordenholt, George D., Min. Engr., Pres., Natural Gasoline Co., 5600 Santa Fe Ave., Los Angeles, Cal.		'14

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Norman, John E., Min. Engr.....	1267 Race St., Denver, Colo.	'99
Norman, Sidney, Journalist, Editor, <i>Canadian Min. World</i> ,	412 Brock Bldg., Toronto, Ont., Canada.	'17
Norrie, J. P., Mgr., Malartic Gold Mines, Ltd.....	Amos, Que., Canada.	'26
Norrie, Lanfear B., Min. Engr.....	Room 1206, 15 W. 38th St., New York, N. Y.	'22
Norris, E. M., Supt., Fertilizer Dept., Anaconda Copper Min. Co.....	Conda, Idaho.	'14
**Norris, Frank G., Research Dept., American Rolling Mill Co., Middletown, Ohio.		'29
Norris, George Edward, Min. Engr., Anaconda Copper Min. Co.....	Butte, Mont.	'27
Norris, George L., Met. Engr., Vanadium Corp. of America,	Room 2929, 120 Broadway, New York, N. Y.	'20
Norris, R. V., Jr.....	Jeddo, Pa.	'13
Norsworthy, H. R., Min. Engr., Dominion Explorers, Ltd.,	914 Excelsior Life Bldg., Toronto, Ont., Canada.	'16
North, Mortimer S., Cons. Engr.....	4548 N. Paulina St., Chicago, Ill.	'16
Norton, Edward M., Jr., Ashland Div., The American Roll. Mill. Co.....	Ashland, Ky.	'27
†Norton, John T., Asst. Prof. of Physics, Mass. Inst. of Tech.,	Room 4-037, Cambridge, Mass.	'26
Norton, Wadsworth W., Met., American Smelt. & Refin. Co.,	700 McCornick Bldg., Salt Lake City, Utah.	'14
Norville, Glen S., Geol., Continental Oil Co., 329 Continental Bldg., Ponca City, Okla.		'28
Notman, Arthur, Min. Engr. & Geol.....	Room 1510, 19 W. 44th St., New York, N. Y.	'12
†Notman, George.....	99 John St., New York, N. Y.	'15
Nowels, K. B., Engr. in Charge, U. S. Bureau of Mines, Petroleum Research Office,	Laramie, Wyo.	'28
Nowland, Ralph C., Field Engr., D. C. Jackling....	1800 Hobart Bldg., San Francisco, Cal.	'15
Nowlin, G. H., Jr., Pres., Lynchburg Coal & Coke Co. & Killarney Smokeless Coal Co., Inc.,	600 Law Bldg., Lynchburg, Va.	'27
Nowlin, R. A., Min. Engr., Crozer Land Association.....	Elkhorn, W. Va.	'17
Noyes, Jonathan A., Lake Superior District Mgr., Sullivan Mach. Co.,	1507 Alworth Bldg., Duluth, Minn.	'20
Noyes, William S., Min. Engr.....	819 Mills Bldg., San Francisco, Cal.	'84
Nugel, Karl, Sec., Gesellschaft Deutscher Metallhütten-und Bergleute e.V.,	Lutzowstr. 89-90, Berlin W.35, Germany.	'28
Nutter, Edward H., Min. Engr., Chief Engr., Minerals Separation North American Corp.,	220 Battery St., San Francisco, Cal.	'03
Nyberg, H. E., Min. Engr., Gen'l Mgr., Cia. Minera Las Dos Estrellas, S. A.,	Mineral de Dos Estrellas, Mich., Mexico.	'19
†Nye, George L., Production Engr., Seminole Dist., Tidal Oil Co., Box 97, Seminole, Okla.		'28
Oakes, Francis J., Jr., Min. Engr., Executive, Oakes Mfg. Co., 141 Milk St., Boston, Mass.		'98
Oakes, Harry, Pres. & Mngng. Dir., Lake Shore Mines, Ltd., Kirkland Lake, Ont., Canada.		'23
Oatridge, O. Gordon.....	5345 Underwood Ave., Oakland, Cal.	'28
Oberbillig, John J., Pres. & Mgr., United Mercury Mines Co.,	605 Overland Bldg., Boise, Idaho.	'24
Oberle, Alfred, Investment Bldg.....	Washington, D. C.	'24
Oberlin, Georges.....	3, Allée des Ecureuils, Mulhouse, Haut-Rhin, France.	'20
Oberly, Albert D., Property Engr., H. C. Frick Coke Co.....	Scottsdale, Pa.	'09
Oborne, Wilbur A.....	15, Carrefour de l'Odéon, Paris (6°), France.	'28
†O'Brien, D. F., Pres. & Gen'l Mgr., The A. P. Smith Mfg. Co.....	East Orange, N. J.	'18
O'Brien, Justus R., Mgr., Ingersoll-Rand, Inc., 1010 Boatmens Bank Bldg., St. Louis, Mo.		'25
O'Brien, Melbourne M., Asst. Supt. Sullivan Mine, The Cons. Min. & Smelt. Co. of Canada,	Ltd., 308 Pacific Bldg., Vancouver, B. C., Canada.	'26
O'Brien, Peter A., City Engr., City of Jackson.....	953 North St., Jackson, Miss.	'14
O'Brien, Thomas H., Gen'l Mgr., Inspiration Consolidated Copper Co., Inspiration, Ariz.		'05
O'Carroll, Henry James, Nevada Cons. Copper Co.....	Box 1094, McGill, Nev.	'27
O'Connor, Edward S., Mgr., Utah Iron Ore Corp.....	Box 25, Cedar City, Utah.	'12
O'Connor, John H.....	959 Franklin Ave., Columbus, Ohio.	'26
O'Connor, W. J., Mgr., Utah Dept., American Smelt. & Refin. Co.,	McCornick Bldg., Salt Lake City, Utah.	'26
†Oda, Fumio, Kyushu Teikoku Daiga Ku.....	Fukuokaken, Japan.	'19
Oddie, Tasker L., Mine Operator, United States Senate.....	Washington, D. C.	'02
Of, Charles.....	Palisade, N. J.	'97
Officer, Herbert George, Amerada Pet. Corp.....	Tulsa, Okla.	'14
Ogburn, Robert H.....	Fairbanks, Alaska.	'21
Ogden, Laurence A., Pet. Engr., Empire Oil & Refin. Co.....	Bartlesville, Okla.	'29
†Oglebay, Crispin, Pres., Oglebay-Norton & Co.....	1208 Hanna Bldg., Cleveland, Ohio.	'22
O'Harra, B. M., Supt., Research Lab., American Smelt. & Refin. Co.....	Maurer, N. J.	'22
O'Harra, C. C., Pres. & Prof. of Geol., South Dakota State School of Mines,	Rapid City, S. D.	'03
Ohern, D. W., Geol., Borealis Oil Co.....	709 Braniff Bldg., Oklahoma City, Okla.	'18

For explanation of symbols, see page 5.



Ohno, Norioto, Supt., Mitsui Min. Co., Ltd., Kamioka Hydro-Electric Constr. Office, Funatsu, Yoshiki-gun, Gifuken, Japan.	'22
Ohnsorg, E. L., Supt., American Smelt. & Refin. Co.....Box 268, Alton, Ill.	'17
O'Keeffe, Edward C., Met. Engr., Federal Min. & Smelt. Co.....Wallace, Idaho.	'26
+O'Keeffe, John, Jr., Pet. Engr.....1410 Clela St., Los Angeles, Cal.	'26
O'Kelly, William A., Asst. Chief Min. Engr., Engrg. Dept., Anaconda Copper Min. Co., Water Bldg., Butte, Mont.	'26
Olcott, William J.....2316 E. 1st St., Duluth, Minn.	'87
Oldham, Albert E.....1737 Milam Bldg., San Antonio, Tex.	'25
Oldright, G. L., Supervising Non-Ferrous Met., U. S. Bureau of Mines Intermountain Experiment Sta., Univ. of Utah, Salt Lake City, Utah.	'21
Oleri, Frank J., Civil Engr.....650 Bergenline Ave., West New York, N. J.	'29
Olinger, Robert Wallace, Gen'l Mgr., Huasteca Pet. Co., Av. Juarez 95, Mexico City, D. F., Mexico.	'29
Oliver, Earl, Earl Oliver & Co.....Box 188, Ponca City, Okla.	'15
Oliver, Edwin Letts, Met., Pres. & Gen'l Mgr., Oliver United Filters, Inc., Federal Reserve Bank Bldg., Sansome & Sacramento Sts., San Francisco, Cal.	'02
Oliver, Frank, Min. & Mech. Engr.....1015 Grand View St., Los Angeles, Cal.	'19
Oliver, Roland B.....c/o Mr. Sydney H. Ball, 26 Beaver St., New York, N. Y.	'14
Oliver, Roland Letts, Pres. & Gen'l Mgr., California Cap Co., 1540 San Pablo Ave., Oakland, Cal.	'25
Olson, Louis W., Factory Mgr., The Ohio Brass Co.....Mansfield, Ohio.	'13
+Olsson, Otto A., Gen'l Mgr. & Sec., Hypotheek Min. & Mill Co., Gyde-Taylor Bldg., Wallace, Idaho.	'27
Oltarsh, David M., Civil Engr.....36 W. 44th St., New York, N. Y.	'22
Olund, Henning E., Min. Engr., V.P., The Radiore Co., 1204 Hollingsworth Bldg., Los Angeles, Cal.	'24
Omori, Iichiro, Prof. of Met., Kumamoto Tech. College, Kumamoto, Higo, Japan.	'16
O'Neil, Frederick W., Chief Engr., Ingersoll-Rand Co.....11 Broadway, New York, N. Y.	'13
O'Neill, John J., Min. Geol., Dept. of Geol., McGill Univ.....Montreal, Que., Canada.	'20
Ong, J. N., Concentrator Chief, Rio Tinto Co., Ltd., Minas de Rio Tinto, Huelva, Spain.	'25
Ord, William D., Gen'l Mgr., Empire Coal & Coke Co., Landgraf, McDowell Co., W. Va.	'88
ORDONEZ, EZEQUIEL, Geol. and Engr., Chief Geol., Huasteca Pet. Co., Apt. 94, Tampico, Tamps., Mexico.	'00
Ordway, Charles A., Engr., Engrg. Div., The American Appraisal Co., 165 E. Michigan St., Milwaukee, Wis.	'28
+O'Reilly, Walter T., 1st Lieut.....16th Field Artillery, Fort Myer, Va.	'17
Orr, Charles T., Pres. & Gen'l Mgr., Athletic Min. & Smelt. Co.....Box 469, Joplin, Mo.	'03
Orr, Thomas W., Chem. Engr., Gen'l Mgr., Cia. Salitrera Astoreca, Casilla 26, Antofagasta, Chile.	'19
Orrok, George A., Mech. Engr., Cons. Engr., 52 Vanderbilt Ave., Room 1208, New York, N. Y.	'07
Ortin, Michael F., Prof., Ore Dressing Dept., Ural Polytechnic Inst., Sverdlovsk, U.S.S.R.	'28
Orynski, Ralph J., Supt. of Mills, Mexican Candelaria Co., S. A., Contra Estaca, Sin., Mexico.	'27
Osborn, Campbell, Landowners Oil Association.....547 Kennedy Bldg., Tulsa, Okla.	'25
Osborn, Chase Salmon.....Poulan, Worth Co., Ga.	'16
Osborn, Franklin, Min. Engr., Andes Copper Min. Co., Potrerillos, Chile, Via Chanaral.	'20
Osborn, Walter X., Supt., Charge of Operations, Edward C. O'Brien & Co., Inc., 147 E. Mesquite St., Globe, Ariz.	'16
Osborn, William H., Met. Dept., N. Y. office, Phelps Dodge Corp., 99 John St., New York, N. Y.	'29
Osborne, Clarence B., Pet. Geol. & Engr.....402 Security Bldg., Los Angeles, Cal.	'15
+Osgood, Wentworth H., Engr. Officer, U.S.S. Tennessee, c/o Postmaster, San Pedro, Cal.	'22
Osland, Embert.....1730 N. Harding Ave., Chicago, Ill.	'24
Osler, B. C., Gen'l Mgr., Pardee Bros. & Co., Inc., Lattimer Mines, Luzerne Co., Pa.	'18
Osler, G. F., Pres., Chartiers Creek Coal Co.....1638 Oliver Bldg., Pittsburgh, Pa.	'25
Osmond, Charles H., Cons. Pet. Engr., Crandall & Osmond, 17 Battery Pl., New York, N. Y.	'25
Ospina R., Eduardo.....2540 Ocean Ave., Brooklyn, N. Y.	'28
Ostgren, Gottfrid L., Chief Engr., The New Jersey Zinc Co., 160 Front St., New York, N. Y.	'18
Ostrander, Frank T., V.P., National Supply Corp.....120 Broadway, New York, N. Y.	'27
Ostrea, Enrique Olivar, College of Mines & Engrg., Univ. of Arizona.....Tucson, Ariz.	'29
Otagawa, Masayuki, Civ. Min. Engr....57 Haramachi Itchome, Ushigomeku, Tokyo, Japan.	'04
Otagawa, Tatsuro, Prof. Min. Engrg., Min. Dept., Kyoto Imperial Univ.....Kyoto, Japan.	'17
Otani, Naogoro, Chief Min. Engr., Mitsui Min. Co., Suruga-cho, Nihonbashi-Ku, Tokyo, Japan.	'23
O'Toole, Edward, Gen'l Supt., U. S. Coal & Coke Co.....Gary, W. Va.	'05
Otsubo, Teruo, Min. Engr., The Ikuno Mine.....Asako-gun, Hyogo-Ken, Japan.	'18

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Ott, Leonard E., Supt., A. Guthrie & Co., Inc.	1300 Builders Exchange, St. Paul, Minn.	'24
Ottoy, E. Russell	523 Yale Ave., Morton, Pa.	'26
Otto, Henry H., Min. Engr., Hudson Coal Co.	Scranton, Pa.	'14
Otto, John F.	Hastings, Pa.	'18
Ough, S. W., Met., Mgr., Cia. Minera y Benef. de Maravillas y San Francisco, S. A., Apt. 21, Pachuca, Hgo., Mexico.		'07
†Outzen, Andrew N., Sta. Supt., Detroit City Gas Co.	415 Clifford St., Detroit, Mich.	'24
Overbeck, R. M., Geol., Caracoles Tin Co. of Bolivia	Casilla 674, La Paz, Bolivia.	'20
†Overly, Ralph F., Supt. of Mines, The Gauley Mountain Coal Co., Jodie, Fayette Co., W. Va.		'22
Ovitz, Frank K., Research Engr., Standard Oil Co. of Indiana	Whiting, Ind.	'19
Owen, A. L.	Box 141, Deming, N. M.	'17
†Owen, Kenneth Dale, Geol., Southern Crude Oil Purchasing Co., 807 Frost Bank Bldg., San Antonio, Tex.		'27
Owen, Tom Mackellar	Australian Club, Sydney, N. S. W., Australia.	'14
Owens, Allen L., Chief Geol., Trinidad Oilfields Operating Co., Ltd., Box 18, San Fernando, Trinidad, B. W. I.		'26
Owens, Henry Edward Pettigrew, Min. Engr., Owens-Acme Gold Mines, Ltd., Box 1263, Timmins, Ont., Canada.		'24
Pack, Charles	Room 2720, Woolworth Bldg., New York, N. Y.	'18
Pack, Robert W., Gen'l Supt., Gulf Coast Division, Sun Co.	Box 790, Beaumont, Tex.	'18
Packard, George A., Min. Engr. & Met.	50 Congress St., Boston, Mass.	'92
Packard, Henry J., Chief Geol., Continental Oil Co., 1004 Continental Oil Bldg., Denver, Colo.		'14
Paddock, Lewis E., Min. Engr.	1815½ E. 2nd St., Duluth, Minn.	'05
Paddison, L. F., U. S. Smelt. Refin. & Min. Exploration Co., Box 1785, Salt Lake City, Utah.		'18
†Paeschke, Charles A., Pres., Geuder, Paeschke & Frey Co., 15th St. & St. Paul Ave., Milwaukee, Wis.		'20
Paessler, Robert Tressel, Pres. & Mgr., Robert T. Paessler Co., Inc., 105 Coal Exchange Bldg., Wilkes-Barre, Pa.		'20
†Page, George D., Min. Engr., Phelps Dodge Corp.	Morenci, Ariz.	'22
Page, George S., Min. Engr., Asst. Mgr., Park Works, Crucible Steel Co. of America, Pittsburgh, Pa.		'86
Page, Walter C., Met. Engr., Selection Trust, Ltd., Selection Trust Bldg., Masons Ave., Coleman St., London, E.C.2, England.		'20
Page, William N., Civ. Min. Engr., Cons. Engr.	1863 Kalorama Rd., Washington, D. C.	'80
Page, Wilson K.	146½ N. Union St., Olean, N. Y.	'26
Pagliuchi, Frank D., Min. Engr.	c/o J. Ramacciotti, 421 W. 28th St., New York, N. Y.	'01
Paige, Sidney, Cons. Geol.	3456 Newark St., Washington, D. C.	'14
Paine, Francis Ward, V.P., Copper Range Co.	82 Devonshire St., Boston, Mass.	'12
Paine, Roy E., Student, Stanford Univ.	Stanford University, Cal.	'27
Paine, William A., Pres., Copper Range Consolidated Co., 82 Devonshire St., Boston, Mass.		'06
Painter, Robert K., Mfg., Engr. of Mines, Bitutect, Inc., 6924 S. Stanford, Los Angeles, Cal.		'97
†Paix, Edmond C. M., Oil Engr., Paix & Co., 64, Rue La Boëte, Paris, 8°, France.		'18
Palen, A. G. Paul, Met. Engr., Smelter Supt., Skelleftea Gruvaktiebolag, Kallholmen, Sweden.		'18
Pallanch, Rollin A., Mill Supt., U. S. Smelt., Refin. & Min. Co.	Midvale, Utah.	'25
Palmer, Charles H., Min. Engr., Hatch & Palmer, Ltd., Board of Trade Bldg., St. Johns, Newfoundland.		'29
Palmer, Charles H., Jr., Cons. Min. Engr.	1216 Pacific Mutual Bldg., Los Angeles, Cal.	'12
Palmer, Edgar, Pres., New Jersey Zinc Co.	160 Front St., New York, N. Y.	'16
Palmer, Gualterio C.	Avenida Juarez 83, Mexico City, D. F., Mexico.	'17
Palmer, Irving A., Prof. of Met., Colorado School of Mines	Golden, Colo.	'11
Palmer, Robert E., Cons. Min. Engr.	3 Lombard St., London, E.C.3, England.	'00
Palmer, Russell T., Inspector, Western Electric Co., Inc., 680 Folsom St., San Francisco, Cal.		'24
Palmer, S. L., American Smelt. & Refin. Co.	201 1st St., San Francisco, Cal.	'21
Palmer, Walter S., Prof. of Met., The MacKay School of Mines, Univ. of Nevada	Reno, Nev.	'23
Palmer, William J. A., Cia. De Santa Gertrudis, S. A.	Apt. 1, Pachuca, Hgo., Mexico.	'04
Palmer, William Roy, Cons. Engr.	33 W. 42nd St., New York, N. Y.	'17
Palmer, William S., Jr., Safety Inspector, Wisconsin Steel Co., Inc.	Benham, Ky.	'28
Pamplin, John W.	310 S. Wilson Ave., Bartow, Fla.	'28
Pan, Eduard Adolf, Mngng. Dir., Billiton Maatschappij, Prinsessegracht 21, The Hague, Netherlands.		'24
Pannell, Ernest V., Cons. Engr., The London Aluminum Co., Ltd., Westwood Rd., Aston, Birmingham, England.		'18
Panner, E. N., Pet. Engr.	106½ E. Main St., Shawnee, Okla.	'30

For explanation of symbols, see page 5.

Panting, James A.	El Prado Apt. 1, 345 N. E. 32nd St., Miami, Fla.	'21
Panyity, L. S.	66-68 Main St., Bradford, Pa.	'16
¶Paquette, Radnor J., Min. Engr., Fontana Min. Corp.	Fontana, N. C.	'27
†Pardee, Calvin, III, Asst. to Gen'l Mgr., Pardee Bros. & Co., Inc.	Lattimer Mines, Pa.	'29
Pardee, Frank, Pres., Anthracite Separator Co.	S. Vine & Elm Sts., Hazleton, Pa.	'22
†Pardee, Frank, Jr., Mgr., Anthracite Separator Co.	Vine & Elm Sts., Hazleton, Pa.	'22
Pardee, Franklin G., Min. Geol., Dept. of Conservation, Michigan State Geol. Survey,	Lansing, Mich.	'20
Pardee, I. P., Min. Engr., Pres., Hazleton Iron Works,	Hazleton National Bank, Hazleton, Pa.	'73
Pardee, J. T., Geol., U. S. Geol. Survey	Washington, D. C.	'27
Paredes, T., Min. Engr.	3a de Varsovia No. 51, Mexico City, D. F., Mexico.	'29
¶Parish, Lee H.	Address Wanted.	'27
†Park, Charles F., Jr., Univ. of Minnesota, Dept. of Geol.	Minneapolis, Minn.	'26
Park, Hugh, Mgr., Nipissing Min. Co., Ltd.	Cobalt, Ont., Canada.	'17
†Park, James W., Mine Surveyor, Burmah Corp., Ltd.	Bawdwin, N. S. S., Burmah, India.	'24
¶Park, John Furness, Engr., Elkor Mines Co.	Jarbridge, Nev.	'21
Park, Mungo, Min. Engr.	P.O. Delivery 19, Kuala Lumpur, F. M. S.	'02
Parke, N. Grier, Min. Engr., Glen Alden Coal Co.	Glen Alden Bldg., Scranton, Pa.	'18
Parker, Albert E., Nigerian Base Metals Corp., Ltd.,	Jos. P.O., Northern Nigeria, W. Africa.	'25
¶Parker, Ben H., Geol., E. W. Marland Co., Inc.	Box 338, Ponca City, Okla.	'22
¶Parker, Charles Owen, Mgr., Burlingame & Parker	1901-9 Lawrence St., Denver, Colo.	'24
Parker, D. J., Min. Engr., U. S. Bureau of Mines	Berkeley, Cal.	'17
Parker, Edward W., Director, Anthracite Bureau of Information,	Morris Bldg., 1421 Chestnut St., Rooms 607-10, Philadelphia, Pa.	'90
Parker, Everett H., Otis & Co.	Denver, Colo.	'19
Parker, Herschel C., Cons. Engr. & Field Geol., Allied Gold Exploration Co.,	Hotel Rector, Hollywood, Cal.	'20
¶Parker, Howard A., Illinois Steel Co.	No. 2 Open Hearth, Chicago, Ill.	'28
Parker, J. Heber, Met., Carpenter Steel Co.	Reading, Pa.	'15
¶Parker, Philip H., Student, Carnegie Inst. of Tech.	Pittsburgh, Pa.	'28
Parker, Richard A., Cons. Min. Engr.	911 Equitable Bldg., Denver, Colo.	'32
Parker, Walter H., Prof. of Min., School of Mines, Univ. of Minnesota,	Minneapolis, Minn.	'20
Parkinson, Lute J.	Instructed to hold everything.	'22
Parks, Ernest K., Standard Oil Co. of California	Bin XX, Taft, Cal.	'29
Parks, Henry M.	Fort Rock, Ore.	'08
¶Parks, Mercer H., Pet. Engr., Humble Oil & Refin. Co.,	c/o W. W. Scott, Drawer D, Houston, Tex.	'28
†Parks, Roland Dane, Asst. Prof., Civ. & Min. Engrg., Michigan College of Mines,	Houghton, Mich.	'20
Parmelee, James G., Bunker Hill & Sullivan Min. & Conc. Co.,	1022 Crocker Bldg., San Francisco, Cal.	'18
¶Parmenter, Charles O., Gas Lift Engr., Westcott & Greis, Inc.,	406 Tulsa National Bank Bldg., Tulsa, Okla.	'27
Parr, S. W.	Wellington Apt., 15th St., Moline, Ill.	'18
¶Parris, John F., Min. Engr., Research Dept., Anaconda Copper Min. Co.,	Anaconda, Mont.	'28
Parrish, Karl C., Min. Engr.	Box 6, Barranquilla, Colombia.	'09
Parry, Claude W., Engr., Fyvie & Stewart	360 Collins St., Melbourne, Vic., Australia.	'21
¶Parry, George W., Student, Pennsylvania State College	State College, Pa.	'26
Parsens, Benjamin Everett, Asst. Dir., Production, General Petroleum Corp.,	1003 Higgins Bldg., Los Angeles, Cal.	'21
Parsons, Arthur B., Min. Engr., V.P., Mineral Research Corp.,	Suite 1635, 120 Broadway, New York, N. Y.	'14
Parsons, Claude P., Field Engr., Halliburton Oil Well Cementing Co.	Duncan, Okla.	'27
¶Parsons, Edward W., Jr. Engr.	La Cienega, Dto. Rayon, Chih., Mexico.	'26
†Parsons, Ernest, Min. Geol., Ste. Industrielle et Miniere du Congo Oriental,	c/o Standard Bank of South Africa, Tabora, Tanganyika Territory, E. Africa.	'21
¶Parsons, Gordon W., Sample Boss, McIntyre Porcupine Mines, Ltd.,	Schumacher, Ont., Canada.	'27
†Parsons, Ian H., Research Dept., Edison Storage Battery Co.	West Orange, N. J.	'29
¶Parsons, Richard W., Student, Met. Engrg., Ohio State Univ.	Columbus, Ohio.	'24
Partridge, Guy Warner, Chief Chem., Cia. Minera Asarco,	Apt. 66, San Luis Potosi, S. L. P., Mexico.	'19
†Partridge, Nelson H., Mining	1218 N. Crescent Heights Blvd., Hollywood, Cal.	'18
†Paschke, Herbert, Research Engr., Research Div., Armstrong Cork Co.	Lancaster, Pa.	'27
Pascoe, C. F., Met., Canadian Steel Foundries, Ltd.,	307 Craig St. W., Montreal, Que., Canada.	'26



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†Pascoe, Hubert Leonard, Gen'l Mgr., Blue Blaze Coal Co., 1102 Walker Bank Bldg., Salt Lake City, Utah.	'19
Passow, Frederick Malet.....	'02
Pasuchin, Wasili Alexandrowitsch, Prof. of Met., Min. Academy, 11 B. Kalugskaia, Moscow, U.S.S.R.	'28
Patch, Donald H., Mine Foreman, Mexican Premier Mines.....	'28
Patch, N. K. B., Sec., Lumen Bearing Co.....	'18
Paterson, Arthur W.....	'12
Pates, James S., Pres., The Export Coal Co.....	'27
Patron, Antenor Rizo, Min. & Met. Engr.....	'21
Patron, Gerardo Rizo.....	'14
Patten, Earle B., Min. Engr., Mine Supt., Doe Run Lead Co.....	'25
Patterson, Albert H.....	'29
Patterson, Charles H. J., Cons. Engr. (Mine Shafts, Tipples, Washeries, etc.), 411 First National Bank Bldg., Welch, W. Va.	'17
Patterson, Clarence Thomas, Met., The Solvay Process Co.....	'88
Patterson, G. S., Min. Engr., Sec. & Treas., Sycamore Coal Co.....	'22
Patterson, Lloyd George, Furnace Supt., Lime Kilns, American Cyanamid Co., Niagara Falls, Ont., Canada.	'20
Patterson, Meade W., Supt., Sheet Mill, Bridgeport Brass Co.....	'28
Patterson, Robert C., Supervisor, Oil & Gas Operations, U. S. Geol. Survey, Box CC, Taft, Cal.	'15
Patterson, R. D., Pres., Weyanoke Coal & Coke Co.....	'12
Patterson, S. B., Jr., Min. Engr., Gen'l Mgr., Calcite Quarry Corp., R. R. No. 1, Lebanon, Pa.	'14
Patterson, Samuel White, Pres., Sycamore Coal Co., 822 First Huntington National Bank Bldg., Huntington, W. Va.	'16
Pattinson, R. L., Producer of Natural Gas & Petroleum.....	'20
Pattison, Everett H., Min. Engr.....	'29
Patton, F. E., Min. Engr., Granby Cons. Min., Smelt. & Power Co.....	'13
Patty, Ernest Newton, Dean of College & Head of School of Mines, Alaska Agricultural College & School of Mines, College, Alaska.	'20
Paul, James W., Min. Engr. ....	'15
Paul, Murray John, Engr., Empire Cos.....	'27
Paul, Russell B., Min. Engr., The New Jersey Zinc Co.....	'13
Paul, William Henry, Cons. Min. Engr., Mgr., Evelyn Gold Copper Co.....	'20
Paulick, P. R., Pittsburgh Coal Co.....	'27
Paulsson, N. A. V., Asst. Gen'l Mgr., Ludlum Steel Co.....	'21
†Pauly, Karl A., Elec. Engr., General Electric Co.....	'08
Paxson, William B., Min. Engr., Lehigh Valley Railroad Co.....	'21
Paymal, George W., Min. Engr. & Met.....	'04
Payne, Arthur C., V.P., Dir. & Treas., Trans-Lux Daylight Picture Screen Corp., 247 Park Ave., New York, N. Y.	'91
Payne, C. Q., Min. Engr.....	'81
Payne, Roy A., Geol.....	'28
Pazdzierz, Joseph Edward.....	'27
Peabody, Harlan W., Geol., Mid-Continent Pet. Corp.....	'20
†Peabody, Stuyvesant, Pres., Peabody Coal Co.....	'20
Peacock, D. C.....	'14
Peake, A. W., Pres., Dixie Oil Co., Inc.....	'20
Peale, Rembrandt, Coal Operator.....	'11
†Peale, Rodgers, Min. Geol., Peale & Peale.....	'20
Pearce, Clyde M., Mgr., Emerlite Surfacing Products Co.....	'21
Pearce, Milton, Safety Engr., Braden Copper Co.....	'24
Pearl, Holman I., Con. Engr.....	'16
Pearman, J. Errol.....	'20
Pearshall, William G., Executive Officer, Mesabi Mineral Association, 1009 Alworth Bldg., Duluth, Minn.	'18
Pearse, Hubert A., Met., Britannia Min. & Smelt. Co.....	'28
Pearson, Alfred, Jr., Field Engr.....	'17
Pearson, John L., State Inspector of Mines & Quarries, Dept. of Mines., Flinders St., Adelaide, South Australia.	'17
Pease, F. N.....	'82
Peck, Nelson C., Parker Bros.....	'24
Peck, Walter R., Gen'l Mgr., Black Diamond Collieries.....	'11
Peckitt, Leonard, Chem., Pres., Warren Fdry. & Pipe Co....	'89
Peddar, Thomas C.....	'15
Pedersen, Harald, Prof., Technical University.....	'20
Peebles, Charles Roland.....	'21
†Peek, R. L., Jr., Bell Telephone Lab.....	'23
Peek, Robert, Prof. of Min., School of Mines, Columbia University....	'83

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# MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES 115

Peirce, Carl Wilmot.....	Collins, Huron Co., Ohio.	'26
Peirce, George Gilbert, Member of Drill. Crew, Richfield Oil Co., A. G. Bartlett Bldg., Los Angeles, Cal.		'26
Peirce, Grier H., Student, Univ. of West Virginia.....	Morgantown, W. Va.	'24
Peirce, William H., Pres., Baltimore Copper Smelt. & Rolling Co., P. O. Highlandtown Branch, Canton, Baltimore, Md.		'94
Peirce, W. M., Asst. to Chief of Research, Research Div., New Jersey Zinc Co.		
Pekovich, W. S., Gen'l Mgr., Admiralty-Alaska Gold Min. Co.....	Palmerton, Pa.	'27
Pell, Van Dyne, Min. Engr.....	Juneau, Alaska.	'20
Pellissier, Andre Eugene Clement, Gen'l Mgr., Pechelbronn Societe Anonyme d'Exploitations Minières, 32 Allee de la Robertsau, Strasbourg (Bas-Rhin), France.		'25
Peltier, M. F., V.P., Peabody Coal Co.....	1652 McCormick Bldg., Chicago, Ill.	'19
Pelton, E. F., V.P., F. C. Linde Co.....	Beach & Varick Sts., New York, N. Y.	'17
Pelton, Roger T., Engr.....	Box 937, Bisbee, Ariz.	'04
Pemberton, John R., Chief Geol. & Mgr. of Dev. & Production, Pet. Securities Co., 10th & Flower Sts., Los Angeles, Cal.		'17
Pembroke, Earl R., Min.....	666 E. S. Temple St., Salt Lake City, Utah.	'14
Pena, Aniceto, Cons. Min. Engr.....	1465 Gobierno St., Box 44, Oruro, Bolivia.	'24
Penberthy, J. E., Min. Engr., Mine Mgr., Union Minière du Haut Katanga, Elisabethville, Belgian Congo, W. Africa.		'09
Penhallegon, W. J., Gen'l Supt., Ore Mine, Republic Iron & Steel Co., Birmingham, Ala.		'10
Penhallegon, William Kenneth, Sec. & Treas., Penhallegon Fdry. Supply Co., 4330 First Ave. S., Birmingham, Ala.		'26
Penhoel, L. C., Pres., Southwestern Engrg. Corp.....	606 S. Hill St., Los Angeles, Cal.	'19
Penick, Walter L., Met. Engr., Western Mgr., Hardinge Co., Inc., Continental Bank Bldg., Salt Lake City, Utah.		'18
Penn, Nicholas Samuel, Prof. of Min., Siberian Inst. of Tech.....	Tomsk, Siberia, via London.	'26
Pennebaker, E. N., Geol., Consolidated Coppermines Corp.....	Kimberly, Nev.	'22
Penny, Frederick W., Phoenix Oil & Transport Co., Casuta Postala No. 1, Ploesti, Romania.		'19
Penrose, R. A. F., Jr., Min. Engr. & Geol.....	Bullitt Bldg., Philadelphia, Pa.	'89
Penrose, Spencer, Min. Engr.....	Colorado Springs, Colo.	'17
†Pentegoff, Vladimir P., Geol. Engr., Radiore Co.....	9035 Venice Blvd., Los Angeles, Cal.	'29
Pentland, W. J., Mine Mgr., Cia. Minera del Aguila, S. A.....	Magdalena, Jal., Mexico.	'01
Pepperberg, Leon J., Cons. Geol., Columbia Engrg. & Management Corp., 99 N. Front St., Columbus, Ohio.		'21
Percy, Harry Lord, Pres., Magistral Copper Co.....	111 Devonshire St., Boston, Mass.	'28
Perin, Charles P., Cons. Engr., C. P. Perin & S. M. Marshall, 17th Floor, Salmon Tower Bldg., 11 W. 42nd St., New York, N. Y.		'90
†Perini, V. C., Jr., Geol., Merry Bros. & Perini, 1908 Fort Worth National Bank Bldg., Fort Worth, Tex.		'20
Perkins, Alfred E., Dist. Mgr., Crucible Steel Co. of America, 2635 Walnut St., Denver, Colo.		'20
Perkins, Enoch, Mutual Chemical Co. of America.....	270 Madison Ave., New York, N. Y.	'16
†Perkins, John R., American Telephone & Telegraph Co., 40 Rector St., New York, N. Y.		'20
Perkins, W. A., Asst. to Gen'l Mgr., Chile Exploration Co.....	Chuquicamata, Chile.	'18
Perkins, Walter G., Cons. Engr. & Met., 70 Finsbury Pavement, London, E.C.2, England.		'01
Perkins, William A.....	Kennecott, Alaska.	'26
†Perring, Ronald J., Asst. Mine Foreman, Burmah Corp., Ltd.....	Bawdwin, N. S. S., Burma.	'29
Perrott, G. St. J., Supt., Pittsburgh Experiment Sta., U. S. Bureau of Mines, 4800 Forbes St., Pittsburgh, Pa.		'26
Perry, F. E., Min. Engr.....	230 Monterey Rd., South Pasadena, Cal.	'20
Perry, Howard E., Mining Operator.....	52 Exchange St., Portland, Me.	'15
Perry, John E., Pres., Valley Mould & Iron Corp.....	Hubbard, Ohio.	'13
Perry, John G., Pres., Perry-Jacobs Rubber Co.....	1545 Lincoln St., Denver, Colo.	'09
Perry, O. B., Cons. Min. Engr., 604-605 California Commercial Union Bldg., 315 Montgomery St., San Francisco, Cal.		'01
Perry, R. M., Min. Engr., Asst. to Pres. & Gen'l Supt., The Moffat Coal Co., 504 Gas & Electric Bldg., Denver, Colo.		'15
Perry, Robert S., Pres., Perry & Webster, Inc., & Perry Corp., 31 Union Square, New York, N. Y.		'95
†Perry, Vincent D.....	Cananea, Son., Mexico.	'24
Pesout, Edward, Gen'l Foreman, Nevada Cons. Copper Co.....	Box 1245, McGill, Nev.	'23
Peters, C. B.....	110 William St., New York, N. Y.	'18
†Peters, George L., Pres., Peters Brothers Rubber Co., Inc., 160 John St., Brooklyn, N. Y.		'20
Peters, Richard, Jr.....	426 Stephen Girard Bldg., 21 South 12th St., Philadelphia, Pa.	'02
Petersen, Sverre.....	7241 Maryland Ave., University City, Mo.	'20
Peterson, Arthur E., Pres., Engrg. Labs., The C. M. Fassett Co., Inc., 209 N. Wall St., Spokane, Wash.		'27

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Peterson, Axel M., Field Engr., Yukon Gold Co.....	Ampang, Selangor, F. M. S.	'13
Peterson, Clarence J., Geol., Empire Gas & Fuel Co.....	Bartlesville, Okla.	'16
Peterson, Clyde Burdette.....	Casilla 17, Tocopilla, Chile.	'25
Peterson, E. Clarence, Jr. Met., Concentration Testing Dept., International Smelt. Co., Box 488, Tooele, Utah.		'25
Peterson, Frank P., Pet. Engr., Asst. Supt., Mid-Continent Pet. Corp., Cosden Bldg., Tulsa, Okla.		'17
Peterson, Joseph S., Supt., Real Dist., Cia. de Real del Monte y Pachuca, Pachuca, Hgo., Mexico.		'27
Peterson, Orrin P., Min. Geol., William H. Taylor, Trustee, Room 1205, 318 W. 9th St., Los Angeles, Cal.		'18
Peterson, Robert M., Mine Supt., Roan Antelope Copper Mines, Ltd., N'Dola, Northern Rhodesia, Africa.		'20
Peterson, William, Prof. of Geol., Utah Agricultural College, State Geologist of Utah, Logan, Utah.		'20
Petersson, Walfrid, Prof., The Royal School of Mines.....	Stockholm, Sweden.	'05
Petkoski, Thomas, Cons. Supt., Lehigh Coal & Navigation Co.....	Lansford, Pa.	'19
Petrecca, William H., Asst. Transitman, Berwind White Coal Min. Co.....	Windber, Pa.	'27
†Petsch, Arthur H., Ohio Mexico Oil Corp., S. A.....	Apt. 134, Saltillo, Coah., Mexico.	'19
Pett, Imer, Gen'l Mgr., Bingham Mines Co.....	404 Dooly Block, Salt Lake City, Utah.	'21
Pettis, Edson S., South American Development Co.....	Apt. 655, Guayaquil, Ecuador.	'15
Petty, Dabney E., Assoc. Geol., Bureau of Economic Geol. & Tech. Univ. of Texas, Austin, Tex.		'25
Petty, Olive Scott, Chief Engr., Petty Geophysical Engineering Co., 10 Tenth St., San Antonio, Tex.		'26
†Petzel, Charles L., Engrg. Dept., New York Trap Rock Corp.....	Newburgh, N. Y.	'16
Pew, J. Edgar, V.P., Sun Oil Co.....	Box 953, Dallas, Tex.	'17
Pew, John G., V.P., Columbia Gas & Electric Corp., Room 2924, 61 Broadway, New York, N. Y.		'17
†Pew, Thomas W., Supt. of Air & Gas Dept., The Twin State Oil Co., 4th Floor, Pet. Bldg., Box 1501, Tulsa, Okla.		'29
Pfahler, Robert G., Div. Engr., Berwind-White Coal Min. Co.....	Windber, Pa.	'22
Pfeiffer, G. N., Cons. Engr.....	121 S. 17th St., Herrin, Ill.	'19
Pfeiffer, George W.....	5020 N. 15th St., Philadelphia, Pa.	'97
Pfordte, Otto F., Min. Engr.....	Cairo, Greene Co., N. Y.	'89
Pfautz, Charles Y., Engr., The Dorr Co.....	7019 Tulane Ave., St. Louis, Mo.	'15
Phalen, W. C.....	Drawer 1 & 2, Syracuse, N. Y.	'12
Phelan, R. E., V.P., charge of Operations, Hudson Bay Min. & Smelt. Co., 500 Royal Bank Bldg., Winnipeg, Man., Canada.		'20
†Phelps, George H., Metallographist, Metropolitan Engrg. Co., 1250 Atlantic Ave., Brooklyn, N. Y.		'20
Phelps, W. B., Gen'l Supt., South American Dev. Co., Box 655, Guayaquil, Ecuador.		'16
†Phemister, Harry I., Raleigh Wyoming Min. Co.....	Glen Rogers, W. Va.	'29
Phibbs, W. R., Mgr., Utah Operations, Columbia Steel Corp.....	Provo, Utah.	'13
Philippi, H.....	Dagoweg 135, Bandoeng, Java, N. E. I.	'22
†Phillips, Albert J., Met., Scovill Mfg. Co.....	Waterbury, Conn.	'22
Phillips, Arthur, Met., Asst. Prof. of Met., Hammond Laboratory, Yale Univ. New Haven, Conn.		'18
Phillips, D. McN., Min. Engr., Supt., Riverside Fullers Earth Plant, The Texas Corp., Box 33, Riverside, Tex.		'14
Phillips, Joseph L., Civ. Engr.....	4968 Highland View Ave., Los Angeles, Cal.	'01
Phillips, Louis.....	Villa Nova de Lima, Minas Geraes, Brazil.	'01
†Phillips, S. E.....	Thane, Alaska.	'24
Phillips, Walter W., Pres., Phillips Dev. Co.....	Phillips, Mont.	'19
Philpott, Royden C., Supt., Cerro Min. Dept., Cerro de Pasco Copper Corp., Cerro de Pasco, Peru.		'14
†Phin, Robert P.....	311 Jamaica Ave., Astoria, L. I., N. Y.	'27
Pythyon, Harry, Inspector of Mines, Commonwealth of Pennsylvania....	Belle Vernon, Pa.	'28
Pickard, Byron O., Cons. Engr.....	256 Mission St., San Francisco, Cal.	'21
Pickard, Greenleaf Whittier, Cons. Elec. Engr., Wireless Specialty Apparatus Co., 131 State St., Boston, Mass.		'20
Pickering, J. C., Patino Mines & Enterprises Cons.....	Llallagua, Bolivia.	'14
Pickett, George B., Oil Lands, Rotary Drilling....	815 Coleman Ave., Corpus Christi, Tex.	'15
Pierce, C. A., Gen'l Supt., U. S. Potash Co.....	Carlsbad, N. M.	'16
Pierce, F. E., Cons. Engr.....	230 Park Ave., New York, N. Y.	'14
Pierce, H. L., Sec., The M. A. Hanna Co.....	1300 Leader Bldg., Cleveland, Ohio.	'28
Pierce, James H., Cons. Min. Engr., Stuart, James & Cooke, Inc., Whitehall Bldg., New York, N. Y.		'20
Pierce, Orville H., Met. Engr., Aluminum Ore Co.....	East St. Louis, Ill.	'20

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Pierson, Harold L., Tech. Supervisor, Torrington Branch, American Brass Co.,	Torrington, Conn.	'28
Pierson, J. L., Oregon Copper Co.....	Baker, Ore.	'26
†Pietsch, Peter H., Methods Engr., Western Electric Co., 2511 West 23rd St., Chicago, Ill.	Chicago, Ill.	'25
Piez, Charles, Pres., Link-Belt Co.....	910 South Michigan Ave., Chicago, Ill.	'15
Pifer, Augustus Poindexter, Student, Univ. of Washington.....	Seattle, Wash.	'28
Pigott, Curtis, Met., Asst. Supt., Copper Queen Smelter, Phelps Dodge Corp., Douglas, Ariz.	Douglas, Ariz.	'14
Pike, Robert D., Cons. Chem. Engr., Pike & West.....	4068 Holden St., Emeryville, Cal.	'20
Pilger, Theodore, Foreign Bond Buying Dept., National City Co.,	55 Wall St., New York, N. Y.	'20
Pilgrim, Earl R., Gen'l Mgr., Elmes Gold Min. Co. of Alaska.....	Fairbanks, Alaska.	'21
Pill, John R., Cons. Engr., V.P., Southern Mineral Land Co.,	908 Southern Ry. Bldg., Birmingham, Ala.	'06
Pilling, Norman B., Met., International Nickel Co.....	Bayonne, N. J.	'20
Pillow, Albert E., Asst. Mgr., The Australian Cement, Ltd.....	Geelong, Vic., Australia.	'18
Pimentel, Victor J., Sampler.....	202 Virginia Apts., Butte, Mont.	'28
Pinfold, Ernest Sheppard, Geol., Mngng. Agent, The Indo-Burma Petroleum Co., Ltd.,	Box 132, Rangoon, Burma, India.	'21
Pinkney, Harry D. ....	Canon City, Colo.	'24
Pippin, Gilbert I. ....	2727 Budlong Ave., Los Angeles, Cal.	'27
Pishel, Max Albert, Geol.....	414 Mid-Continent Bldg., Tulsa, Okla.	'20
Pitcher, Norman Charles, Min. Engr., Prof. of Min. Engrg., Univ. of Alberta,	Edmonton, Alta., Canada.	'21
Pitkin, Stephen H. ....	422 West Market St., Akron, Ohio.	'87
†Pitner, Paul J., Real Estate & Investments.....	558 East Colorado St., Pasadena, Cal.	'21
Pitt, Dale L., Min. Engr., Mgr., Premier Gold Min. Co., Ltd.....	Premier, B. C., Canada.	'16
†Pittman, Dalton B., Chief Engr., Moctezuma Copper Co., Pilares de Nacozari, Son., Mexico.	Pilares de Nacozari, Son., Mexico.	'28
Piva, Henry J., Student, Univ. of Utah.....	Salt Lake City, Utah.	'25
Plank, William B., Head, Min. Dept., Lafayette College.....	Easton, Pa.	'19
Plate, H. Robinson, Cons. Min. Engr.....	Holbrook Bldg., San Francisco, Cal.	'10
Platt, Frederick Clark, Geol.....	Box 414, Shelby, Mont.	'20
Platt, Frederick J., Elec. Engr., Pres., Scranton Electric Construction Co.,	627 Connell Bldg., Scranton, Pa.	'06
Platt, James M. ....	446 South Speedway Dr., Beverly Hills, Cal.	'16
Platts, John B., Min. Geol.....	Box 1085, Wallace, Idaho.	'24
Plein, Leo N., U. S. Bureau of Mines.....	4800 Forbes St., Pittsburgh, Pa.	'20
Pleister, Henry W., V.P. & Gen'l Mgr., Diamond Expansion Bolt Co.....	Garwood, N. J.	'21
Plock, Albert F., Pres., Pittsburgh Metallurgical Co.....	Niagara Falls, N. Y.	'10
Plumb, Charles William, Mgr., Cons. Copper & Sulphur Co.....	Eustis, Que., Canada.	'20
Plummer, F. B., Geol., Bureau of Economic Geol., Univ. of Texas.....	Austin, Tex.	'17
Plummer, Philip J. A., Shell Co. of Australia, Ltd.....	Broken Hill, N. S. W., Australia.	'24
†Plut, Frank J., Min. Engr., Amherst Min. Co.....	Crosby, Minn.	'22
Pogrebniak, Jacob J. ....	1134 Hyde St., San Francisco, Cal.	'27
Pogue, Joseph E., Cons. Engr.....	42 West 12th St., New York, N. Y.	'14
Poillon, Howard A., Min. Engr., Poillon & Poirier.....	11 Broadway, New York, N. Y.	'07
Poirier, C. Herbert, Cons. Min. Engr., Poillon & Poirier.....	11 Broadway, New York, N. Y.	'14
Poister, Ralph S., Alan Wood Steel Co.....	Conshohocken, Pa.	'20
†Polack, Samuel P., Scranton Coal Co.....	Scranton, Pa.	'24
Polatchek, Jerome J., Constr. Supt. & Estimator.....	57 Willoughby, St., Newark, N. J.	'25
Polisson, William George, Bureau of Mines, Univ. of Utah.....	Salt Lake City, Utah.	'27
Polkinghorne, Wilfrid C., Instr., Michigan College of Mines.....	Houghton, Mich.	'21
Pollak, Robert R., Min. & Pet. Engr.....	65 Piedmont St., San Francisco, Cal.	'15
Pollen, Clement H., Min. Engr.,	c/o Canadian Bank of Commerce, 2 Lombard St., London, E.C., England.	'02
Polson, Alexander, Pres., Polson Logging Co., Inc.....	Hogquiam, Wash.	'15
Polushkin, E. P., Met. Engr., Instr. of Met., School of Mines, Columbia Univ.,	New York, N. Y.	'20
Pomeroy, Horace G., Min. Engr.....	Fairmont Hotel, San Francisco, Cal.	'03
Pomeroy, L. L., Caracoles Tin Co. of Bolivia.....	Casilla 674, La Paz, Bolivia.	'19
Pomeroy, R. E. H., Supt., Durango Smelter, American Smelt. & Refin. Co., Durango, Colo.	Durango, Colo.	'14
Pomeroy, W. D., Gen'l Mgr., The Goulds Mfg. Co.....	Seneca Falls, N. Y.	'18
Pompeia, Jonas.....	Rua Theodoro Sampaio 180, Sao Paulo, Brazil.	'18
Poncelet, Eugene F. M., Engr., Union Miniere du Haut Katanga,	3-5 Rue de la Chancellerie, Brussels, Belgium.	'24
Pond, Walter F., State Geol., Tennessee Div. of Geol....	401 7th Ave. N., Nashville, Tenn.	'16
Ponton, Gerald M., Asst. Geol., Florida State Geol. Survey.....	Box 495, Tallahassee, Fla.	'17
Poor, William B., Asst. Engr., Columbia Engrg. & Management Corp.,	99 North Front St., Columbus, Ohio.	'26
Pope, A. C., Mineral Point Zinc Co.....	Mineral Point, Wis.	'17
Pope, D. J., Asst. Supt., Parral Unit, Cia. Minera Asarco..	Apt. 85, Parral, Chih., Mexico.	'22
†Popescu, Teodor G., Refinery Chem., Rafineria Aurora.....	Baicoi, Romania.	'23

# 118 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Popoff, Gregory C., The Bunker Hill & Sullivan Min. & Concentrating Co., Box 1148, Kellogg, Idaho.	'27
Porch, Edwin L., Jr., Cons. Geol.....Frost Bldg., San Antonio, Tex.	'14
Portella, Carlos A., Min. Engr., Fundicion El Eco.....Cerro de Pasco, Peru.	'19
Porter, Earle S., Asst. Gen'l Mgr., Amerada Pet. Corp.....Tulsa, Okla.	'26
Porter, H. Hobart, Cons. Engr.....52 William St., New York, N. Y.	'86
Porter, J. McD., Civil, Min. & Cons. Engr.....Peyton Bldg., Spokane, Wash.	'24
Porter, Jesse C., Min. Engr.....Robins Bldg. 510, Havana, Cuba.	'09
Porter, John Bonsall, Prof. & Dir. of Min., McGill Univ.....Montreal, Que., Canada.	'83
Porter, John Jermain, Met. Engr., V.P. & Gen'l Mgr., North American Cement Corp., Hagerstown, Md.	'04
Porter, Rudolph, Mgr., American Smelt. & Refin. Co., Federal Plant.....Federal, Ill.	'16
Porter, W. E. ....710 Denver National Bldg., Denver, Colo.	'13
Porter, William W., 2nd, Geol., Pacific Eastern Production Co., 8315 Beverly Blvd., Los Angeles, Cal.	'25
Posada, Juan de la C., Min. Engr.....Medellin, Antioquia, Colombia.	'04
Posada Gaviria, V. ....55 Avenue de Tervueren, Brussels, Belgium.	'25
Posso, Carlos, Min. Engr.....Cali, El Valle, Colombia.	'22
Postle, Lawrence T., Min. Engr., Lake Shore Mines, Ltd.....Kirkland Lake, Ont., Canada.	'29
Poston, E. M., Pres., Manhattan Oil Co.....150 East Broad St., Columbus, Ohio.	'21
Pott, Cyrus Thomas.....Princes House, Gresham St., London, E.C., England.	'26
Potter, Charles Franklin, Suite 8, Singer Bldg., Corner Oakland & Colorado, Pasadena, Cal.	'06
Potter, D., Gen'l Mgr., Edwards Min. Co.....Grants Pass, Ore.	'25
Potter, Edward C. ....2745 Brandywine St., Washington, D. C.	'79
Potter, George W., Gen'l Supt. of Mines, Eagle-Picher Lead Co.....Picher, Okla.	'17
Potter, Horatio, Engr., Love-Bryan & Co.....Fourth & Pine, St. Louis, Mo.	'21
Potter, James A., Construction Engr., New Cornelia Copper Co.....Ajo, Ariz.	'15
Potter, William C., Min. Engr., Pres., Guaranty Trust Co. of N. Y., 140 Broadway, New York, N. Y.	'97
Potts, Allen Dewey, Met., Simonds Saw & Steel Co.....Box 358, Lockport, N. Y.	'19
Potts, William M., Civ. Engr., Mgr., Isabella Furnace.....Wyebrooke, Chester Co., Pa.	'86
Poulsen, Magnus, Min. & Met. Engr., Gen'l Mgr., Societe Belge Industrielle et Miniere du Katanga, Simkat, Elisabethville, Katanga, Belgian Congo, Africa.	'18
POURCEL, ALEXANDRE, Ingenieur Civil des Mines, 2 Square du Roule, Paris, France.	'77
Powel, De Veaux, Agent, Sterling Coal Co.....29 Broadway, New York, N. Y.	'84
Powell, Donald A., Pet. Geol.....1455 Eastwood Ave., Columbus, Ohio.	'18
Powell, Edward T. ....Box 152, Nanticoke, Pa.	'24
Powell, Frederick J., Lawyer, Powell, Lowrie & Ruch.....120 Broadway, New York, N. Y.	'15
Powell, J. Brentnall, Supt., Electrolytic Tank Houses, Baltimore Copper Smelt. & Roll. Co., Baltimore, Md.	'29
Powell, John Wilson, Min. Engr.....Box 916, Welch, W. Va.	'26
Powell, William Carlos, Geol., Dept. of State Engrg., State of New Mexico, Box 1079, Santa Fe, N. M.	'27
Power, Frederick Danvers, Min. Engr.....68½ Pitt St., Sydney, N. S. W., Australia.	'91
Power, Harry H., Pet. Engr., Production Dept., Gypsy Oil Co.....Tulsa, Okla.	'26
Powers, Joseph Francis, Mgr., Liberty Metals Co.....Troy, Mont.	'28
Powers, Sidney, Pet. Geol., Cons. Geol., Amerada Petroleum Corp.....Tulsa, Okla.	'17
Poy, Clarence William.....365 East 12th St., Portland, Ore.	'24
Pozharsky, Ivan I., Chem., American Smelt. & Refin. Co.....Perth Amboy, N. J.	'27
Prather, Harold P. ....4938 Aldrich Ave. S., Minneapolis, Minn.	'26
Pratt, George H., Assayer & Chem., G. H. Pratt & Co., Room 10, 105 East First St., Los Angeles, Cal.	'22
Pratt, J. Weston, Instr. of Metallography, Mass. Inst. of Tech.....Cambridge, Mass.	'25
Pratt, Jack C., Ingersoll-Rand Co.....11 Broadway, New York, N. Y.	'22
Pratt, Joseph Hyde, Cons. Engr. & Advisor.....Chapel Hill, N. C.	'97
Pratt, Wallace E., Min. Geol., Dir., Humble Oil & Refin. Co.....Houston, Tex.	'13
Prescott, Basil, Cons. Geol., Chief Cons. Min. Co.....Eureka, Utah.	'15
Prescott, Harry T., Chem., Anaconda Copper Min. Co., 625 First Ave. N., Great Falls, Mont.	'28
Presley, BeVan .....Kennebecot, Alaska.	'19
Preston, Veryl .....Hohokus, Bergen Co., N. J.	'12
Prevost, Albert A., Mech. Engr., Crushing Plant Foreman, United Verde Copper Co., Clarkdale, Ariz.	'27
Price, Albert Chenoweth, Pet. Engr. & Geol.....Pineville, Mo.	'28
Price, David James, Engr. in charge, Chem. Engrg. Div., Bureau of Chemistry & Soils, U. S. Dept. of Agriculture, Washington, D. C.	'27
Price, E. F., V.P., Union Carbide & Carbon Corp., Pres. & Dir. of various of its sub- sidiaries, 30 East 42nd St., New York, N. Y.	'24
Price, Harold C., Met. Engr., Mgr. & Owner, Welding Engrg. Co., Johnstone Bldg., Bartlesville, Okla.	'16
Price, Henry B. ....Room 1603, 17 Battery Pl., New York, N. Y.	'06

For explanation of symbols, see page 5.

Price, H. L., Min. Engrg. Dept., Lehigh & Wilkes-Barre Coal Co., 16 South River St., Wilkes-Barre, Pa.	'26
Price, John Fred, Jr., Responsible Engr., Cia. Minera Nazareno y Catasillas, S. A., Salaverna, Zac., Mexico.	'27
Price, John M., Min. Engr., Supt., The Castile Min. Co.....	Ramsay, Mich. '13
Price, S. S., Geol.....	1502 Philtower Bldg., Tulsa, Okla. '18
Price, W. Armstrong, Cons. Geol.....	808 Esperson Bldg., Houston, Tex. '20
Price, William B., Chief Chem. & Met., Scovill Mfg. Co.....	Waterbury, Conn. '18
Price, William R., Mgr., Curlew Min. Co.....	Montana Club, Helena, Mont. '17
Priddy, Gordon C., Messrs. Henry Wiggin & Co., Ltd., Victoria St., Smethwick, England.	'22
†Pride, William Lillard, Trainmaster, Cerro de Pasco Railway Co., Cerro de Pasco, Peru.	'24
Prideaux, James H., Min. Engr., R. V. Norris & Son., 524 Second National Bank Bldg., Wilkes-Barre, Pa.	'22
Priestley, William J., V.P., Electro Met. Sales Corp., 30 East 42nd St., New York, N. Y.	'15
Primrose, Harry S., Met. Chem., Messrs. Campbell & Gifford, 17 Victoria St., Westminster, London, S.W.1, England.	'19
Primrose, John, V.P., Foster Wheeler Corp.....	165 Broadway, New York, N. Y. '26
Prince, George Wallace, Asst. Mgr., United Verde Extension Mining Co..	Clemenceau, Ariz. '17
Prindle, Edwin J., Patent Lawyer, Prindle, Wright, Neal & Bean, Trinity Bldg., 111 Broadway, New York, N. Y.	'14
Pringle, O. L., Pittsburgh Crucible Steel Co.....	Midland, Pa. '19
Pringle, Robert W., Cons. Min. Engr.....	Box 31, Gatooma, S. Rhodesia, S. Africa. '02
†Pringle, William Dick.....	6648 Wilkins Ave., Pittsburgh, Pa. '21
Prior, Charles E., Gen'l Mgr., The Wiluna Gold Mines, Ltd., Wiluna, Western Australia, Australia.	'16
Pritula, Alexander Fomitsh, Min. Engr.....	21 Krapotkin St., Moscow, U.S.S.R. '28
†Probert, Alan, Asst. Mill Supt., Sunnyside Min. & Mill Co., Eureka, San Juan Co., Colo.	'25
Probert, Frank H., Cons. Engr., Min. Geol., Min. Dept., University of California, Berkeley, Cal.	'00
Probst, Elmer A., Mgr., La Vitorita Min. Co.....	Amalfi, Colombia. '22
Prochazka, George A., Jr., Chem. Engr., Gen'l Mgr., Central Dyestuff & Chem. Co., Pium Point Lane, Newark, N. J.	'13
Procter, Ernest, Asst. Geol., Burmah Oil Co., Ltd.....	Myaungghla, Upper Burma, India. '29
Prommel, Harald W. C., Cons. Geol.....	724-725 First National Bank Bldg., Denver, Colo. '12
Prosser, Herman A., Met. Engr., V.P., American Smelt. & Refin. Co., 120 Broadway, New York, N. Y.	'97
†Protz, Donald E., Student, Iowa State College.....	Ames, Iowa. '29
Proust, Rene, Min. Engr.....	Box 90, Kuala Lumpur, F. M. S. '91
Prout, F. S., Geol., Rocky Mountain Div., Empire Gas & Fuel Co., Box 255, Roswell, N. M.	'20
Prout, John W., Jr., Min. Engr., Met., Gen'l Mgr., Central Copper Co. of Arizona, Dos Cabezas, Ariz.	'04
Prouty, Roswell W., Min. Engr. & Geol., 1223-1224 Pacific National Bank Bldg., Los Angeles, Cal.	'28
Prouty, William F., Prof., Economic Geol., Dept. of Geol., Univ. of North Carolina, Chapel Hill, N. C.	'14
Provine, George, Gen'l Mgr., The Tulsa Lead & Zinc Co.....	Box 67, Miami, Okla. '27
†Prud'homme, H., Banker, G. M. P. Murphy & Co.....	52 Broadway, New York, N. Y. '25
Pryde, George Brown, V.P. & Gen'l Mgr., The Union Pacific Coal Co., First National Bank Bldg., Rock Springs, Wyo.	'25
Pryer, W. C., Research Met., Pyrites Co., Ltd.....	Wilmington, Del. '14
Pulsifer, H. B., Met., Ferry Cap & Set Screw Co.....	Cleveland, Ohio. '06
†Pumphrey, M. E., District Sales Mgr., General Refractories Co., 40 Rector St., New York, N. Y.	'26
†Pursel, Robert N., Jr. Min. Engr., Caracoles Tin Co. of Bolivia, Casilla 674, La Paz, Bolivia.	'28
†Purves, Arnold William, Anaconda Copper Min. Co.....	Butte, Mont. '27
Purvis, R. Allison, Gen'l Mgr., Cie. Nouvelle des Mines de Villemagne, Villemagne (Gard), France.	'21
†Putman, Norman C., Chem., American Smelt. & Refin. Co.....	Perth Amboy, N. J. '26
†Putnam, H. L., Machinery Dept., National Supply Co. of California, 147 North Los Angeles St., Los Angeles, Cal.	'28
Putnam, W. P., Cons. Chem. & Met., Pres. & Gen'l Mgr., The Detroit Testing Lab., 554 Bagley Ave., Detroit, Mich.	'18
†Putnam, William C., Graduate Student, Geol. Dept., Stanford Univ., Box 1383, Stanford University, Cal.	'29
Putnam, Willis S. ....	New Salem, Mass. '21
†Pyburn, Paul F., Jr., Supt., Asientos Unit, American Smelt. & Refin. Co., Asientos, Ags., Mexico.	'18
Pyne, Francis R., Met. Engr., Supt., Raritan Copper Wks.....	Perth Amboy, N. J. '08



# 120 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Quade, John C., Chief Engr., Saline County Coal Co.....	Harrisburg, Ill.	'17
Quarrie, Bertram D., Min. Engr., Pres., Oliver Iron & Steel Corp., 10th & Muriel Sts., Pittsburgh, Pa.		'08
Quealy, P. J., Pres., The Kemmerer Coal Co.....	Kemmerer, Wyo.	'14
Queneau, A. L. J., U. S. Steel Corp.....	71 Broadway, New York, N. Y.	'02
Quick, Roger C., Student, Ohio State Univ. ....	Columbus, Ohio.	'27
Quicker, Edwin A. ....	701 Centre Ave., Reading, Pa.	'92
Quigley, Arthur H., V.P., Detroit Branch, The American Brass Co., 174 South Clark Ave., Detroit, Mich.		'28
Quigley, W. S., Pres., Quigley Furnace Specialties Co., 56 West 45th St., New York, N. Y.		'18
Quigly, W. J., Pres., Howe Sound Co.....	730 Fifth Ave., New York, N. Y.	'16
Quinby, Harry D., Min. Engr. & Met.....	26 Parnassus Ave., San Francisco, Cal.	'20
Quinn, Clement K., Clement K. Quinn & Co.....	1050 Union Trust Bldg., Duluth, Minn.	'18
Quinn, M. F., Guanajuato Cons. Min. & Milling Co.....	Guanajuato, Gto., Mexico.	'15
Quinn, T. S., Treas., Lebanon Steel Foundry.....	Lebanon, Pa.	'21
Quirke, Terence Thomas, Prof. of Geol., 245 Natural History Bldg., Univ. of Illinois, Urbana, Ill.		'29
Radcliffe, Donald Hewson.....	5930 Franklin Ave., Hollywood, Cal.	'15
Radcliffe, Thomas D., Met. Engr., Standard Oil Co. of California, Met. Lab., Richmond, Cal.		'20
Raddatz, Emil John, Pres. & Gen'l Mgr., Tintic Standard Min. Co., 1111 Walker Bank Bldg., Salt Lake City, Utah.		'25
Raddatz, Harold E., Univ. of Utah.....	Salt Lake City, Utah.	'25
Radford, Walter J., Engr., Gen'l Mgr., The Blue River Placer Min. Co., Breckenridge, Colo.		'24
Radford, Wm. H., Min. Engr.....	2360 Broadway, San Francisco, Cal.	'76
Radosavlyevitch, Branislav M. ....	Address Wanted.	'24
Rae, Colin C., Geol. Dept., Skelly Oil Co.....	Tulsa, Okla.	'20
Ragatz, Roland A., Asst. Prof. of Chem. Engrg., Univ. of Wisconsin, Chem. Engrg. Bldg., Madison, Wis.		'25
Ragaz, Ivan, Min. Engr.....	Andeer, Grison, Switzerland.	'02
Rahilly, H. J., Asst. Gen'l Supt., Anaconda Copper Min. Co.....	Butte, Mont.	'16
Rahmlow, Herbert William, Student, Lawrence College.....	Appleton, Wis.	'28
Raiber, Nicolaus H. ....	108 South Walnut St., Kingston, Pa.	'15
Raick, Julien M. J. O., Tech. Prize, A. I. Liege, 1923; Chief Engr., Cie. Royale Asturienne des Mines, 6 Boulevard Pasteur, Douai (Nord), France.		'21
Raigrodsky, Paul M., V.P. & Gen'l Mgr., Pet. Engrg., Inc., 1604 Philtower Bldg., Tulsa, Okla.		'29
Rain, Allan D., Mill Supt., Braden Copper Co.....	Sewell, Rancagua, Chile.	'20
Rains, L. F., Columbia Steel Corp.....	215 Market St., San Francisco, Cal.	'25
Rainsford, Ralph S., Bond Dept., Prudential Insurance Co.....	Newark, N. J.	'03
Rait, D. M., Chief Engr., Calumet & Arizona Mining Co.....	Warren, Ariz.	'16
Rakowsky, Victor, Cons. Min. Engr., Oklahoma-Kansas-Missouri Zinc-Lead Fields, Joplin, Mo.		'05
Ralston, Oliver C., Met.....	Clarkdale, Ariz.	'15
Ramage, John H., Met., Engrg. Dept., Westinghouse Lamp Co.....	Bloomfield, N. J.	'17
Ramsay, Erskine, Chairman of the Board & Gen'l Cons. Engr., Alabama By-Products Corp., Birmingham, Ala.		'88
Ramsey, E. R., The Dorr Co.....	247 Park Ave., New York, N. Y.	'15
Ramsey, William M., Met., Pickands Mather & Co., Union Trust Bldg., Cleveland, Ohio.		'28
Ramstedt, Axel P., V.P., Tamarack & Custer Cons. Min. Co....	Day Bldg., Wallace, Idaho.	'20
Rand, Lenox H., Investigator, Attorney General, State of New York, 74 Trinity Pl., New York, N. Y.		'26
Rand, Wendell P., Student, Science Hall, Univ. of Wisconsin.....	Madison, Wis.	'26
Randall, Clarence B., Asst. V.P., Inland Steel Co.....	38 South Dearborn St., Chicago, Ill.	'29
Randall, David V., Gen'l Mgr., Susquehanna Collieries Co., Miners Bank Bldg., Wilkes-Barre, Pa.		'11
Randall, Harradon R., V.P. & Mgr., Rhoads Contracting Co.....	Ashland, Pa.	'23
Rangel, Rafael, San Francisco Mines of Mexico, Ltd., San Francisco Del Oro, Chih., Mexico.		'27
Rank, Raymond A., Geol.....	Apt. 85, Maracaibo, Venezuela.	'20
Rankin, Alexander Cecil, Civ. & Min. Engr., Simpson & Rankin, 175 Hope St., Glasgow, Scotland.		'26
Rankin, Bryant L., Physical Lab., American Steel & Wire Co.....	Worcester, Mass.	'25
Rankin, James J., St. Joseph Lead Co.....	Herculaneum, Mo.	'18
Ranney, Leo, Pres., Ranney Oil Min. Co.....	Room 700, 26 Broadway, New York, N. Y.	'26
Ransome, Frederick Leslie, Prof. of Economic Geol., California Inst. of Tech., Pasadena, Cal.		'01
Rappold, William F., Anglo-American Corp. of South Africa, Ltd., Broken Hill, Northern Rhodesia, S. Africa.		'29

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## MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES 121

Rappoport, Frederick Gerald, Civil Engr., Gen'l Mgr., British Controlled Oilfields, Ltd., Apt. 232, Maracaibo, Venezuela.	'27
Rash, Frank D., Cons. Min. Engr.....360 Starks Bldg., Louisville, Ky.	'05
Rashleigh, W. J., Geol., City Engr.....Ely, Minn.	'20
Rathbun, Ross B., Bag House & Cottrell Plant Engr., American Smelt. & Refin. Co., 1212 Mills Bldg., El Paso, Tex.	'16
Rathjens, G. W. ....2182 Stanford Ave., St. Paul, Minn.	'17
†Rattle, Paul S., Mgr., Central Warehouse & Storage Co., 453 Commercial St., Los Angeles, Cal.	'17
Rau, C. E. S., Min. Engr. & Geol., Inspector of Mines, Robertsonpet P. O., Kolar Gold Field, South India.	'20
Rau, H. L., Pet. Geol., Carter Oil Co.....Box 2045, Tulsa, Okla.	'16
Rausch, W. S., Min. Engr., Lehigh Coal & Navigation Co.....Lansford, Pa.	'21
Ravicz, Louis, Pet. Geol., Hayden, Stone & Co.....25 Broad St., New York, N. Y.	'16
Rawdon, Henry S., Met., Bureau of Standards.....Washington, D. C.	'20
Rawlings, Stuart L. ....315 Montgomery St., San Francisco, Cal.	'02
Rawson, Henry W., Cons. Min. Engr., Gen'l Mgr., McDowell Coal & Coke Co., McDowell, W. Va.	'28
Ray, Franklin Arnold, Cons. Min. Engr., Room 2, Commercial National Bank Bldg., Columbus, Ohio.	'90
Ray, Horatio C. ....805 Washington Ave., Tyrone, Pa.	'13
Ray, James C., Cons. Geol.....865 Hamilton Ave., Palo Alto, Cal.	'29
Rayburn, John M., Civil & Min. Engr.....1115 House Bldg., Pittsburgh, Pa.	'23
Raymond, B. G., Commonwealth Min. & Exploring Co., 115 Western Ave. W., Seattle, Wash.	'28
Rea, James C., Mgr., Oliver Iron & Steel Co.....Pittsburgh, Pa.	'17
Rea, Walter C., Sales Mgr., Maine Road Equipment Co., 315 Forest Ave., Portland, Me.	'17
Read, Clifford W., Instructor, Chemistry & Geol., Visalia High School & Jr. College, Box 894, Visalia, Cal.	'24
Read, Davis, Chief Engr., West Kentucky Coal Co.....Sturgis, Ky.	'21
Read, J. Burns, Metals Exploration Co.....829 Symes Bldg., Denver, Colo.	'13
Read, Norman H., Min. Geol.....Manchester, Mass.	'16
Read, Thomas T., Vinton Prof. of Min. Engrg., School of Mines, Columbia Univ., New York, N. Y.	'03
Reagan, William Joseph, Asst. Supt., Open Hearth, Edgewater Steel Co., Oakmont, Allegheny Co., Pa.	'29
Reber, Louis E., Jr., Geol., United Verde Copper Co.....Jerome, Ariz.	'17
Redfearn, Albert M., Mgr., McCord Radiator & Mfg. Co., 176 Walker Rd., Walkerville, Ont., Canada.	'02
†Reece, Edward T., New Zealand Representative, American Brass Co., 154-156 Hereford St., Christchurch, N. Z.	'28
Reece, Oliver, Min. & Met. Engr.....1512 Masonic Ave., San Francisco, Cal.	'28
Reed, Albert E., Engrg. Dept., The W. S. Tyler Co....3615 Superior Ave., Cleveland, Ohio.	'26
Reed, Avery H., Cons. Min. Engr., Univ. of Virginia.....Box 27, University, Va.	'15
Reed, C. James, Mine Surveyor, Burmah Corp., Ltd.....Bawdwin, N. S. S., Burma, India.	'25
†Reed, Carl S., Wood Struthers & Co.....20 Pine St., New York, N. Y.	'14
†Reed, Daniel H., Engr.....P. O., Navesink, N. J.	'25
†Reed, E. F., Geol., Andes Copper Min. Co.....Chanaral, Chile.	'21
Reed, J. O., Mgr., Acme Coal & Coke Co.....Stigler, Okla.	'22
Reed, John C., Dept. of Geol., Princeton Univ.....Princeton, N. J.	'27
Reed, Robert MacA., Student, New Mexico School of Mines.....Socorro, N. M.	'27
Reed, Wade M., Cons. Min. Engr.....Ashland, Pa.	'21
Reeder, Edwin C., Supt., Hillside Fluorspar Mines.....Rosiclare, Ill.	'08
Rees, Seth P., Montreal Min. Co.....Montreal, Wis.	'24
Reese, Arnold K. ....Arundel Lodge, St. George's Hill, Weybridge, Surrey, England.	'91
Reese, John F., Min. Engr.....219 Atlantic Ave., Brooklyn, N. Y.	'21
Reese, John N., Asst. to Gen'l Supt., Pittsburgh Steel Co.....Monessen, Pa.	'07
Reese, L. V., Sec. & Gen'l Mgr., Erie City Iron Wks.....Erie, Pa.	'20
†Reese, Seth Thomas, Colliery Supt., Dickson-Manville Collieries, Hudson Coal Co., Scranton, Pa.	'22
Reeve, J. R., Pet. Engr., U. S. Geol. Survey.....315 Fratt Bldg., Billings, Mont.	'27
Reeves, Thomas V., Min. Engr.....509 First National Bank Bldg., San Francisco, Cal.	'09
Reger, David B., Acting State Geol., W. Va. Geological Survey.....Morgantown, W. Va.	'14
Reger, James S. ....Box 830, Vernon, Tex.	'28
Rehfuß, William H., Student, Oregon State College.....Corvallis, Ore.	'29
Reichardt, Walter Frederick, Cons. Municipal Engr.....109 Main St., Watertown, Wis.	'25
Reichert, William G., Chem. & Met., Singer Mfg. Co.....Elizabeth, N. J.	'27
Reid, Fraser D., Gen'l Mgr., The Coniagas Mines, Ltd., 410 Crown Office Bldg., Toronto, Ont., Canada.	'20
Reid, John M., Asst. Supt., Olyphant Colliery, Hudson Coal Co.....Olyphant, Pa.	'26
Reid, Joseph W., Min. Engr.....963 Rayburn Blvd., Memphis, Tenn.	'06
Reid, Sidney K., Mngng. Engr., Oglebay, Norton & Co., 1208 Hanna Bldg., Cleveland, Ohio.	'27

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+Reifsnider, A. C.	Bisbee, Ariz.	'24
Reigart, John R., V.P. & Mgr., Iron Mountain Lead & Zinc Co.,		
	Box 356, Baxter Springs, Kans.	'18
Reilly, William C., V.P., The Youngstown Sheet & Tube Co.	Youngstown, Ohio.	'14
Reinartz, Leo F., Asst. Gen'l Supt., American Roll. Mill Co.	Middletown, Ohio.	'25
Reinartz, Philipp M., Mngng. Dir., Armco-Eisen Gesellschaft m.b.H.,		
	Hochhaus, Cologne, Germany.	'27
Reinhold, Herman, Min. & Met. Engr., Pres., Reinhold Met. Co.,		
	103 South 18th St., Omaha, Neb.	'19
Reinecke, Leopold, Cons. Geol., 42 Beresford House, Johannesburg, Transvaal, S. Africa.		'20
Reinhardt, Gustave A., Met. Engr., Youngstown Sheet & Tube Co.	Youngstown, Ohio.	'13
+Reinhardt, Joseph A., Met. & Asst. Chief Engr., Western Clock Co.	La Salle, Ill.	'21
Reinoso, E. A., Research Chem., Raritan Copper Wks.	Perth Amboy, N. J.	'23
Reis, Albert V., Min. Engr., Mines Agent, Fife Coal Co., Ltd., Cowdenbeath, Fife, Scotland.		'20
+Reis, James W., Jr., Min. Engr.	604 North Euclid Ave., Tucson, Ariz.	'19
+Reish, Charles	Box 898, Tooele, Utah.	'26
Reisher, Paul H., Asst. Geol., Gypsy Oil Co.	Box 2044, Tulsa, Okla.	'21
Reiter, Wilhelm Arthur	Box 856, Mexia, Tex.	'20
+Reith, Colin W., Student, Mass. Inst. of Tech.	Cambridge, Mass.	'26
Remick, Walter L., Mgr., Hydrotator Co.	Markle Bank Bldg., Hazleton, Pa.	'14
Remington, Arthur E., The Pure Oil Co., 1140 Subway Terminal Bldg., Los Angeles, Cal.		'18
+Remmers, Walter Edward, Met. Engr., Western Electric Co., Hawthorne Sta., Chicago, Ill.		'23
Remy, Jorge Felix, Min. & Civil Engr., Mgr., Negociacion Minera Fernandini,		
	Avenida 28 de Julio 736, Miraflores, Lima, Peru.	'21
+Renick, Abbott	171 Inglewood Dr., Toronto, Ont., Canada.	'21
Renner, Henry Melvin, City Mgr.	City Hall, Woodward, Okla.	'29
Reno, Jesse W., Cons. Engr.	261 Broadway, New York, N. Y.	'87
+Repas, M. M.	Ajo, Ariz.	'21
Repetti, G. W., Div. Sales Mgr., The Dorr Co., Inc.	247 Park Ave., New York, N. Y.	'25
+Requa, Lawrence K., Geol.	111 Sutter St., San Francisco, Cal.	'19
Requa, M. L., Min. Engr.	111 Sutter St., San Francisco, Cal.	'00
Rettie, W. H., Min. Engr.	32 Glover Ave., Yonkers, N. Y.	'14
Reuleaux, O., Engr., Metallbank und Metallurgische Gesellschaft, Frankfurt A. M., Germany.		'27
Revere, Joseph W., Min. Engr.	Canton, Mass.	'81
+Rexford, Elmer Glenn, Chino Mines, Engrg. Dept., Nevada Consolidated Copper Co.,		
	Santa Rita, N. M.	'27
Rey, Maurice R. W., Engrg., Union Miniere du Haut Katanga,		
	Panda, Katanga, Belgian Congo, via Cape Town.	'29
Reybold, E. C., Jr., Sec. & Office Mgr., The Dorr Co.	824 Cooper Bldg., Denver, Colo.	'23
Reyer, E. E., Supt., Dolores Unit, Cia. Minera Asarco, S. A.,		
	Minas Dolores y Anexas, Matehuala, S. L. P., Mexico.	'17
+Reyes, Francisco Alvar, Compania Minera Choco Pacifico,		
	Andagoya, via Buenaventura, Colombia.	'26
+Reynders, Charlton	c/o J. V. W. Reynders, 120 Broadway, New York, N. Y.	'21
Reynders, John V. W.	Room 3048, 120 Broadway, New York, N. Y.	'12
Reynolds, Louis J., Chief Engr., Negociacion Minera de San Rafael y Anexas, S. A.,		
	Apt. 79, Pachuca, Hgo., Mexico.	'29
Reynolds, W. J., Pet. Geol.	9 Orchard Rd., Shalford, Surrey, England.	'19
Rhead, Ezra Lobb, Lecturer on Met. & Assaying, Dir. of Met. Labs., College of Tech.,		
	Univ. of Manchester, Manchester, England.	'18
Rhoades, Roy Stites, Pet. Geol.	1311 Edwards & Wilbey Bldg., Los Angeles, Cal.	'17
Rhodes, Charles, Mngng. Dir., Waihi Gold Min. Co., Ltd., 60 Shortland St., Auckland, N. Z.		'08
Rhodes, Fred N., Wilsons (N. Z.) Portland Cement, Ltd.	Portland, N. Z.	'97
Rice, C. A., Supt. of Lead & Zinc Mines, Laclede Lead & Zinc Co., Baxter Springs, Kans.		'21
+Rice, Charles Vance, Jr. Min. Engr., Tennessee Copper Co. Staff House, Ducktown, Tenn.		'27
Rice, E. R., Min. Engr.	1279 Trestle Glen Rd., Oakland, Cal.	'08
Rice, George Samuel, Chief Min. Engr., U. S. Bureau of Mines	Washington, D. C.	'86
Rice, H. M. Anthony, Asst. Geol., Britannia Min. & Smelt. Co.,		
	Britannia Beach, B. C., Canada.	'29
Rice, John, Pres., General Crushed Stone Co.	Drake Bldg., Easton, Pa.	'92
+Rice, Neil W., V.P., U. S. Smelt. Refin. & Min. Co.	1 State St., Boston, Mass.	'23
+Rice, Theodore A.	c/o C. M. & S. Co., Trail, B. C., Canada.	'27
Rich, Herbert W.	409 Ridgewood Ave., Glen Ridge, N. J.	'26
Rich, John D., V.P. & Asst. Gen'l Mgr., The National Fuse & Powder Co.,		
	3801 Delgany St., Denver, Colo.	'26
Rich, John Lyon, Cons. Geol.	Box 3, Ottawa, Kans.	'20
Richard, George A., Min. & Met. Engr., Kinellen, Kynuna, North Queensland, Australia.		'97
Richard, Louis M., Cons. Geol., Gladding McBean & Co., & Los Angeles Pressed Brick Co.,		
	San Francisco, Cal.	'18



Richards, A. H., Tacoma Smelter, American Smelt. & Refin. Co.	Tacoma, Wash.	'16
Richards, Franklin B., Chairman, Hanna Furnace Co. & Dir., The M. A. Hanna Co., 1300 Leader News Bldg., Cleveland, Ohio.		'90
†Richards, Harry Ames, Pres., Petroleum Reclamation Co., Looker Oil Co. & Beaver Oil Corp., 60 Beaver St., New York, N. Y.		'28
Richards, H. DeC., Hydraulic & Min. Engr.	Crocker Bldg., San Francisco, Cal.	'05
Richards, John W., Assayer & Chem.	1118 19th St., Denver, Colo.	'91
Richards, Ralph W., Pet. Geol.	Apt. 85, Maracaibo, Venezuela.	'19
RICHARDS, ROBERT H., Gold Medallist, Min. & Met. Society of America; Prof. Emeritus of Min. Engrg., Mass. Inst. of Tech., Cambridge, Mass.		'73
Richards, W. J., Min. Engr.	1311 Howard Ave., Pottsville, Pa.	'90
Richardson, A. C., Engr., N. W. Experimental Sta., U. S. Bureau of Mines	Seattle, Wash.	'29
Richardson, Allan S., Mine Ventilation Engr., Anaconda Copper Min. Co.	Butte, Mont.	'24
†Richardson, C. N., Research Engr., Mathieson Alkali Works, Inc.	Niagara Falls, N. Y.	'21
Richardson, Charles A.	Box 2971, Winnipeg, Man., Canada.	'23
Richardson, Charles F., V.P. & Gen'l Mgr.	West Kentucky Coal Co., Sturgis, Ky.	'17
Richardson, Charles H., Prof. of Mineralogy & Head of Dept., Syracuse University, Syracuse, N. Y.		'23
Richardson, G. B., Geol., Geological Survey	Washington, D. C.	'28
Richardson, L. J.	"Lidi" Lungern, Obw., Switzerland.	'28
Richardson, Stanley A., Plant Met., South Chicago Wks., Interstate Iron & Steel Co., Chicago, Ill.		'27
Richardson, W. H., Supt., Cornucopia Mines Co.	Cornucopia, Ore.	'21
Richardson, Warren V., Min. Engr.	Box 76, Tonopah, Nev.	'03
Richelsen, Walter A., Min. Engr., Chief Engr., Kennecott Copper Corp.	Kennecott, Alaska.	'15
Richert, George L., Chief Engr., Minas de Matahambre	Pinar del Rio, Cuba.	'29
†Richmire, George Lowell, Lieut., U. S. Navy, Destroyer Squadron, 12, Battle Fleet, U.S.S. Litchfield (336) San Diego, Cal.		'28
†Richmond, A. Morton, Asst. Resident Engr., Gov't of the Province of British Columbia, Nelson, B. C., Canada.		'26
Rickard, Brent N., Mgr., El Paso Smelt. Wks.	El Paso, Tex.	'25
Rickard, Edgar	Room 2000, 42 Broadway, New York, N. Y.	'96
Rickard, Forbes, Cons. Min. Engr.	307 Engineers Bldg., Denver, Colo.	'92
Rickard, T. A., Historian & Archeologist	250 Tunnel Rd., Berkeley, Cal.	'88
Ricker, Spangler	O'Okiep, Namaqualand, Cape Province, Union of S. Africa.	'28
Ricketts, L. D., Min. Engr.	325 Pacific Southwest Bank Bldg., Pasadena, Cal.	'92
Ricketts, Palmer C., Pres., Rensselaer Polytechnic Institute	Troy, N. Y.	'16
Rickleman, F. H., Min. Engr., Works Supt., Electrolytic Refin. & Smelt. Co. of Australia, Ltd., Port Kembla, N. S. W., Australia.		'20
Riddell, Guy C., Cons. Engr.	1 E. 42nd St., New York, N. Y.	'13
Riddell, J. Murray, Min. Engr., Cons. Min. Engr., Crowell & Murray, Inc., Perry Payne Bldg., Cleveland, Ohio.		'17
†Riddell, Walter, Min. Engr., Miami Copper Co.	Miami, Ariz.	'28
Rider, Ezra B., Engr.	207 South Broadway, Los Angeles, Cal.	'16
Ridge, H. M., Cons. Min. & Met. Engr., H. M. Ridge & Co., & The Ridge Roasting Furnace & Engrg. Co., 2 Great Winchester St., London, E.C.2, England.		'99
†Ridge, W. R.	1684 Ocean Ave., Santa Monica, Cal.	'23
Ridings, Lowell J., Asst. Chief Geol., Mexican Sinclair Pet. Corp., Apt. 241, Tampico, Tamps., Mexico.		'30
Rieber, Frank, Geophysicist	170 2nd St., San Francisco, Cal.	'28
Rieber, T., Texas Co.	17 Battery Pl., New York, N. Y.	'25
Ries, H., Prof., Econ. Geol., Cornell Univ.	Ithaca, N. Y.	'95
†Rifat, F., Student, Missouri School of Mines	Box 445, Rolla, Mo.	'28
Riffer, J. E., Prop., St. Catharines Brass Wks., 62-64 George St., St. Catharines, Ont., Canada.		'18
Rigby, W. A.	R.F.D.1, Highland Falls, N. Y.	'16
Rigg, Gilbert, Met. Engr.	Collins House, Collins St., Melbourne, Vic., Australia.	'13
Riggan, Fred Byron, Asst. Met., Stockham Pipe & Fittings Co.	Birmingham, Ala.	'29
Riggs, Robert J., Chief Geol., Indian Territory Illuminating Oil Co.	Bartlesville, Okla.	'20
Rightmire, Robert E., Engr. of Tests, The Consolidation Coal Co., Watson Bldg., Fairmont, W. Va.		'12
Rigler, John D.	Box 217, Avenel, N. J.	'26
Riley, A. D., Mech. Engr., Standard Chem. Co.	Canonsburg, Pa.	'23
†Riley, John C., Jr., Asst. Supt., North American Clay Co.	Langley, S. C.	'23
†Riley, Leonard B., Min. Engr., Victory Mine	Ohio City, Colo.	'26
Rinehart, C. R., V.P., Overman Cushion Tire Co., 250 W. 54th St., New York, N. Y.		'17
Ring, Ambrose E., Mgr., Rawley Mines, Bonanza, Colo.; Western Min. Dept., American Smelt. & Refin. Co., Salt Lake City, Utah.		'05
Ring, Dewitt T., Geol., Ohio Fuel Gas Co.	99 N. Front St., Columbus, Ohio.	'26
†Rinnander, A. J., General Mine Foreman, Moctezuma Copper Co., Pilares de Nacozari, Son., Mexico.		'28

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Ripner, Jacob J., Pres. & Mgr., The Aluminum Smelt. & Refin. Co.,	1265 E. 55th St., Cleveland, Ohio.	'29
Rippere, William H., Asst. Mgr., Ansonia Branch, The American Brass Co.,	414 Meadow St., Waterbury, Conn.	'27
†Riser, G. Seaman, Civ. & Min. Engr., Texas Gulf Sulphur Co., Box 146, Boling, Tex.		'21
Rison, C. O., Gen'l Supt. of Oil Prod., Indian Territory Oil Co. & Subsidiary Cos.,	Bartlesville, Okla.	'25
Ristedt, E. J., Ventilation & Safety Engr., Cia. de Santa Gertrudis,	Apt. 1, Pachuca, Hgo., Mexico.	'17
Ritchie, A. Bruce, Min. Engr., Asst. Mgr. of Mines, Consolidated Min. & Smelt. Co. of Canada, Ltd., Trail, B. C., Canada.		'21
†Ritchie, Kenneth S., Research Chemical Engr., The Signal Oil & Gas Co.,	Box 176, Best, Tex.	'28
Ritter, Ernst, Geol., The Caribbean Pet. Co.....	Maracaibo, Venezuela.	'22
Ritter, Etienne A.....	Drosselstrasse 49, Basle, Switzerland.	'04
Ritter, Ferdinand, Chief Engr., Staso Mill. Co.....	Poultney, Vt.	'15
Ritter, J. Paul, Student, Pennsylvania State College.....	State College, Pa.	'29
Rittman, W. F., Chem. Engr., Carnegie Institute of Tech.....	Pittsburgh, Pa.	'19
Ritzau, Kurt, Dipl. Ing. Geophysicist,	c/o Dr. Garrett Kemp, 3633 Binckley, University Park, Dallas, Tex.	'27
†Rives, Henry M., Sec. & Treas., Nevada Mine Operators Ass'n,	210 Reno National Bank Bldg., Reno, Nev.	'16
Roads, George M., Jr., Supt., The Panther Valley Water Co.....	Lansford, Pa.	'23
Roast, Harold J., Met. Dir., The Robert Mitchell Co., Ltd.,	Box 1596, Montreal, Que., Canada.	'18
Robb, John Francis.....	Trust Co. Bldg., Midland, Pa.	'27
Robbins, Charles P., Pres. & Mgr., Lone Pine-Surprise Cons. Min. Co.,	Box 1910, Spokane, Wash.	'97
Robbins, Cyrus C., Engr., Asst. R. E. Davis, 1710 Union Bank Bldg.,	Pittsburgh, Pa.	'20
Robbins, Frank M., V.P., Ross Meehan Foundries.....	Chattanooga, Tenn.	'24
Robbins, H. R., Cons. Met. Engr., Oriental Cons. Min. Co....	Hokuchin, Chosen (Korea).	'08
Robbins, Hubert Harry, J. A. Russell & Co.....	Kuala, Lumpur, F. M. S.	'29
Robbins, Joseph, Student, Pennsylvania State College.....	State College, Pa.	'29
Robbins, Percy A.....	100 Prospect Ave., Highland Park, Ill.	'01
Robellaz, Fernand, Cons. Min. Engr.....	45, Rue Emile Menier (XVI), Paris, France.	'93
Robert, John A., Chief Engr., Coal Mines, Republic Iron & Steel Co....	Birmingham, Ala.	'20
Roberts, Albert, Minerals Separation, North American Corp., 61 Broadway,	New York, N. Y.	'18
Roberts, B. J., Sales Mgr., Deister Machine Co., 1933 E. Wayne St.,	Fort Wayne, Ind.	'16
Roberts, Claudius H. M., Research Chem., William S. Barnickel & Co.,	937 Pacific Ave., Webster Groves, Mo.	'28
Roberts, Dean G., Highway Engr., Asst. Engr., Ohio State Highway,	Lafayette Hotel, Gallipolis, Ohio.	'26
Roberts, Edward J., Cons. Engr.....	520-22 Financial Center Bldg., San Francisco, Cal.	'16
Roberts, Edward Newton, Jr. Engr., Andes Copper Min. Co.....	Chanaral, Chile.	'25
Roberts, Frank C., Civ. Engr., Frank C. Roberts & Co.,	Real Estate Trust Bldg., Broad & Chestnut Sts., Philadelphia, Pa.	'87
Roberts, George M., Gen'l Mgr., Associated Northern Block (W. A.), Ltd.,	Box 102, Kalgoolie, W. Aust.	'92
Roberts, Hugh M., Min. Geol.....	306 Lonsdale Bldg., Duluth, Minn.	'15
Roberts, John R., Val. Engr., Bureau of Internal Revenue,	601 Sheldon Bldg., San Francisco, Cal.	'18
Roberts, Keith, Min. Engr.....	402, 74 W. Washington St., Chicago, Ill.	'20
†Roberts, Louis C., Jr., Geol., Southern Crude Oil Purchasing Co.,	Box 898, Fort Worth, Tex.	'24
Roberts, Milnor, Min. Engr., Dean, College of Mines, Univ. of Washington,	Seattle, Wash.	'02
Roberts, Morgan E., Geol., The Pure Oil Co.....	Box 814, San Angelo, Tex.	'18
Roberts, Newell W., The Securities Co.....	452 Fifth Ave., New York, N. Y.	'13
Roberts, R. T., Met. Engr., Western Electric Co., Inc., Hawthorne Sta.,	Chicago, Ill.	'18
Roberts, Thomas S., Min. Engr., Staso Milling Co.....	Poultney, Vt.	'23
Roberts, Warren Russell, Pres., Roberts & Schaefer Co., 1110 Wrigley Bldg.,	Chicago, Ill.	'25
Robertson, F. Y., V.P., United States Smelt. Refin. & Min. Co., Inc.,	Room 1600, 75 William St., New York, N. Y.	'15
Robertson, Glenn D.....	1166 Subway Terminal Bldg., Los Angeles, Cal.	'20
Robertson, James D., Chem. & Min. Engr., Robert W. Hunt Co.,	1403 Syndicate Trust Bldg., St. Louis, Mo.	'86
Robertson, James R. M., Min. Engr.....	63 Pitt St., Sydney, N. S. W., Australia.	'03
Robertson, Jasper T.....	711 Spring Arcade Bldg., Los Angeles, Cal.	'14
Robertson, John F.....	Coniston, Ont., Canada.	'14
Robertson, Norman F., Pres., John Robertson Co., Inc.....	133 Water St., Brooklyn, N. Y.	'28
Robertson, W. G., Chem.....	Franklin, N. J.	'20

Robie, Edward H., Met. Engr., Assoc. Editor, <i>Engrg. &amp; Min. Journal</i> ,	
	475 10th Ave., New York, N. Y. '19
†Robins, James H., V.P., Robins Conveying Belt Co.,	
	2600 Park Row Bldg., New York, N. Y. '21
Robins, Lewis Randolph, Min. Engr.....	2646 Dwight Way, Berkeley, Cal. '20
Robins, Thomas, Chairman, Robins Conveying Belt Co., 15 Park Row, New York, N. Y. '92	
Robinson, Arthur Michael, Mgr., Mine de St. Sébastien d'Aigrefeuille,	
	par Gênerargues (Gard), France. '26
Robinson, C. Snelling, 2nd V.P., The Youngstown Sheet & Tube Co....	Youngstown, Ohio. '85
†Robinson, Charles H., Iron Mining, Pettit & Robinson Lands,	
	826 First National Soo Line Bldg., Minneapolis, Minn. '16
†Robinson, Edward Moore.....	Convent, N. J. '16
†Robinson, Ernest Guy, Shell Pet. Corp.....	Box 8, St. Louis, Mo. '21
Robinson, G. P., Mgr., Smelter & Lead Refinery, American Smelt. & Refin. Co.	
	Apt. 101, Monterrey, N. L., Mexico. '20
Robinson, H. S., Min. Engr., Mgr., Exploration Dept., McIntyre Porcupine Mines, Ltd.,	
	Box 25, Schumacher, Ont., Canada. '21
Robinson, Harry O., Min. Engr.....	Apt. 11 B, 585 W. End Ave., New York, N. Y. '02
Robinson, Heath M., Geol.....	304 American Exchange Bank Bldg., Dallas, Tex. '18
Robinson, J. French, Geol., Hope & Peoples Natural Gas Co.,	
	545 William Penn Way, Pittsburgh, Pa. '20
Robinson, Lewis M., Min. Engr., Shift Boss (Mine), Christmas Copper Co.,	
	Box 25, Christmas, Ariz. '23
Robinson, Louis G., Chem. & Ceramist, Met., Louis G. Robinson Laboratories,	
	31 E. 4th St., Cincinnati, Ohio. '18
†Robinson, Ralph Bert, Civil Engr., Morgan Engrg. Co.....	Harlingen, Tex. '28
Robinson, Samuel D., U. S. Reduction Co.....	East Chicago, Ind. '21
Robinson, T. L., Chief Engr., McGill Metal Co.....	Valparaiso, Ind. '25
Robinson, Theodore W.....	Room 1620, 208 S. La Salle St., Chicago, Ill. '84
Robitaille, A. Edmond, Pet. Geol.....	Beloeil Station, Que., Canada. '18
Robson, H. Carmichael, Indian Copper Corp., Moubhander, Ghatsila P. O.,	
	Dist. Singhbhaum, India. '17
†Robson, J. Elliott, Min. Engr., Mineral Separation, Ltd., 25-26 Agency Chambers,	
	Box 267, Bulawayo, S. Rhodesia, Africa. '23
Roca, Edmundo, Min. Engr.....	Plaza de las Cortes, 7 bis, Madrid, Spain. '29
Rocca, B. T.....	62 Townsend St., San Francisco, Cal. '17
Roche, H. M., Cons. Engr.....	Box 68, Dover, N. J. '03
Rochester, Lloyd B., Min. Engr.,	
	Room 317, Ottawa Electric Bldg., Sparks St., Ottawa, Ont., Canada. '20
Rockwell, Irvin E., Pres. & Operating Engr., Minnie Moore Mines Co....	Bellevue, Idaho. '26
Rockwell, Stanley P., Met. Engr., Pres., The Stanley P. Rockwell Co.,	
	66 Trumbull St., Hartford, Conn. '19
Rockwood, Carl A., Supt., Elm Orlu Mine.....	Butte, Mont. '28
Rockwood, Nathan Chamberlain, Editor-Mgr., <i>Rock Products</i> ,	
	542 S. Dearborn St., Chicago, Ill. '24
Roddewig, George W., Min. Engr. & Geol.....	Newhouse Bldg., Salt Lake City, Utah. '12
†Rode, Arne H., Minas de Matahambre.....	Matahambre, Cuba. '24
Roden, Robert M., Student, Univ. of Wisconsin.....	Madison, Wis. '28
†Rodgers, Alan M.....	Box 196, Middletown, N. Y. '17
Rodgers, C. Earl, Min. Engr., Gen'l Mgr., Supt., Sylvanite Gold Mines, Ltd.,	
	Box 525, Kirkland Lake, Ont., Canada. '12
Rodgers, George B., Cons. Engr.....	1003 E. 18th St., Tulsa, Okla. '03
Rodgers, Joseph H., Geol., Western Rep., Universal Exploration Co.,	
	1021 First National Bank Bldg., Denver, Colo. '09
Rodgers, Selden S., Supt. of Copper Concentrator, Anaconda Copper Min. Co.,	
	Anaconda, Mont. '13
Rodgers, William, Research Asst. Met., Donner Steel Co., Inc.....	Buffalo, N. Y. '27
**Rodriguez, Alfred I.....	910 Oxford St., Berkeley, Cal. '29
Rodriguez, Mariano O.....	Trujillo, Peru. '28
Roebbling, Ferdinand W., Jr., Engr., Pres., John A. Roebbling's Sons Co.,	
	640 S. Broad St., Trenton, N. J. '06
Roebbling, Siegfried, V.P., John A. Roebbling's Sons Co., 640 S. Broad St., Trenton, N. J. '21	
Roel, F., Engr.....	7a del Cipres No. 207, Mexico City, D. F., Mexico. '22
Roeser, Frederick.....	Box 144, Pasadena, Cal. '94
Roesler, Max.....	165 Broadway, New York, N. Y. '07
Rogatz, Henry, Geol., Phillips Pet. Co.....	Amarillo, Tex. '26
Roger, John, Mech. Engr.....	32 W. 40th St., New York, N. Y. '20
Rogers, Alexander P., Min. Engr.....	31 Nassau St., New York, N. Y. '04
Rogers, Allen H., Cons. Min. Engr., Rogers, Mayer & Ball,	
	12th Floor, 26 Beaver St., New York, N. Y. '92



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Rogers, Clayton T., Mgr. for Mexico, Cia. Westinghouse Electric Internacional, Edificio "Cidosa", Mexico City, D. F., Mex.	'23
Rogers, Edwin M.....61 Broadway, New York, N. Y.	'82
Rogers, George R., Min. Engr.....Garfield, Colo.	'14
Rogers, Gregory L., Ceramic Engr., Gladding, McBean & Co., 1500 First Ave. S., Seattle, Wash.	'28
Rogers, J. D., Chief Engr., Stonega Coke & Coal Co.....Big Stone Gap, Va.	'20
Rogers, O. P.....Carmel, N. Y.	'14
Rogers, R. B., Mgr., Northwest Magnesite Co.....Chewelah, Wash.	'19
Rogers, Reupert L.....Address Wanted.	'27
†Rohde, O. C., Chief Engr., Champion Spark Plug Co.....Toledo, Ohio.	'21
Rohlfs, Walter V., Min. Engr.....1120 Lombard St., San Francisco, Cal.	'13
Rohn, James O., Supt., New Mexico Public Service Co.....Hot Springs, N. M.	'23
Rolfe, W. J.....Mentone, San Bernardino County, Cal.	'19
Rollason, Geoffrey M., Met., Supt. of Die Casting Div., The U. S. Aluminum Co., Garwood, N. J.	'19
Rolle, Sidney, Min. & Met. Engr., United States Metals Refin. Co., Carteret, Middlesex Co., N. J.	'13
Rollin, George S., V.P., Production, Shell Pet. Corp.....Shell Bldg., St. Louis, Mo.	'21
Rollin, George W., The Pure Oil Co.....35 E. Wacker Dr., Chicago, Ill.	'24
Romanowitz, Charles M., Sales Engr., Yuba Mfg. Co., 501 Balfour Bldg., San Francisco, Cal.	'27
Rome, Adrian Scott, Mgr. The Cam & Motor Gold Min. Co., Ltd., Eiffel Flats, S. Rhodesia, Africa.	'24
†Ronaghan, Arthur J.....Room 2702, 120 Broadway, New York, N. Y.	'20
Rontgen, L. R., Paul, Prof., Techn. Hochschule & Dir., Instituts for Metallhutenwesen und Elektrometallurgie, Aachen, Germany.	'26
Rood, Alfred D., Inspiration Cons. Copper Co.....Box 136, Inspiration, Ariz.	'24
Rookstool, Farris L., Field Geol.....724 Jenkins, Norman, Okla.	'28
Roosevelt, Ralph M., V.P., The Eagle-Picher Lead Co., Graybar Bldg., Suite 1707, 420 Lexington Ave., New York, N. Y.	'24
Roots, Florian L.....Box 10, Baguio, P. I.	'27
Roper, Norman B., Mech. Engr.....879 Kensington Rd., Los Angeles, Cal.	'19
Roripaugh, Charles C., Jr. Engr., Shell Oil Co., Production Dept., 311 Quincy Ave., Long Beach, Cal.	'25
Rorschach, H. E., Cons. Engr.....National Bank of Commerce Bldg., Tulsa, Okla.	'23
Rosaire, E. E., Chief Geophysicist, Gulf Coast Div., Geophysical Research Corp., Esperson Bldg., Houston, Tex.	'29
Roschen, Ernest C., Compañía de Petroleo de Angola.....Loanda, Angola, Africa.	'29
Roscoe, H. L., Horne Copper Corp.....Noranda, Que., Canada.	'23
Rose, Charles A., American Smelt. & Refin. Co.....120 Broadway, New York, N. Y.	'23
Rose, E. Herbert, Mill Supt., The Moctezuma Copper Co.....Nacozari, Son., Mexico.	'26
Rose, Harold James, Asst. Director of Research, The Koppers Co., Koppers Bldg., Pittsburgh, Pa.	'25
Rose, Hugh, Min. Engr., Edificio Woodrow, Esq. Bolivar y 5 de Mayo, Mexico City, D. F., Mexico.	'00
Rose, J. H., Met., Smelter Supt., Magna Copper Co.....Superior, Ariz.	'20
Rosenblatt, Girard B., Elect. Engr., Pacific Coast Industrial Mgr., Westinghouse Electric & Mfg. Co., 607 Crocker First National Bank Bldg., San Francisco, Cal.	'14
Rosengarten, George D., Chem., Dir., Merck & Co., Inc.....Malvern, Pa.	'15
Rosenshine, L. J., Mgr., Compañía Minera Puca Urco.....Casilla 1825, Lima, Peru.	'19
Roseveare, George H.....1402 E. 6th St., Tucson, Ariz.	'23
Ross, Alexander J. M., Mine Supt., Homestake Min. Co.....Lead, S. D.	'07
Ross, Clyde P., Min. Geol., Associate Geol., U. S. Geological Survey, Washington, D. C.	'16
Ross, Ed. G., Mgr., Wyodak Coal & Mfg. Co.....Gillette, Wyo.	'21
Ross, Edward P., Supt., Blast Furnace, Coal Mines, Colonial Iron Co., Riddlesburg, Bedford Co., Pa.	'13
Ross, Gustav, Met. Engr., Zinc Met., Cons. Engr....Bolivar 749, Monterrey, N. L., Mexico.	'24
Ross, Herbert H.....McConnellsville Ohio.	'25
Ross, J. G., Cons. Min. Engr., Milton Hersey Co., Ltd., 980 St. Antoine St., Montreal, Que., Canada.	'07
Ross, James A., Pres., Sprague & Henwood, Inc., & A. W. Drake Drilling Co., 1726 Wyoming Ave., Scranton, Pa.	'28
Ross, Louis, Cons. Engr.....79 Milk St., Boston, Mass.	'13
Ross, R. H. C. LeB., Assayer, Cons. Min. & Smelt. Co. of Canada, Ltd., Trail, B. C., Canada.	'29
†Ross, William Gillies, Pres., Asbestos Corp. of Canada, Ltd., Room 727, Canada Cement Bldg., Montreal, Que., Canada.	'21
Rossback, E. J., Mngng. Dir., Sullivan Machinery Co....36 Ave. de l'Opéra, Paris, France.	'15
Rossberg, William N., Gen'l Mgr., Elm Orlu Min. Co., & Timber Butte Mill. Co., Miner Bldg., Butte, Mont.	'14

For explanation of symbols, see page 5.

# MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES 127

†Rossin, Edgar L., Min. Engr., General Dev. Co., Room 1824, 61 Broadway, New York, N. Y.	'25
Roth, Charles F., Mgr., Chemical, Power, Mechanical Engrg., Heating & Ventilating & Electrical Expositions, International Exposition Co., Grand Central Palace, New York, N. Y.	'19
Rothschild, David, Valuation Engr., State Tax Commission.....	Albany, N. Y. '23
Rott, Edward H., Jr.....	Kimberly, Nev. '28
Rounds, Paul L.....	Box 260, Leadwood, Mo. '26
Rouse, Edwin W., Jr., Mgr., American Smelt. & Refin. Co., Maurer Sta., Perth Amboy, N. J.	'25
Roush, Gar A., Editor, <i>Mineral Industry</i> , In Charge, Mineral Industries Div., Museum of the Peaceful Arts, New York, N. Y.	'14
†Rove, Olaf N., Empire Zinc Co.....	Hanover, N. M. '23
Rowand, Lewis G., Elec. Engr. & Met., Asst. to V.P., New Jersey Zinc Co., 160 Front St., New York, N. Y.	'02
†Rowe, Cecil, Moctezuma Copper Co.....	Pilares de Nacozari, Son., Mexico. '20
Rowe, Charles E., Engrg. Dept., Guggenheim Bros.....	120 Broadway, New York, N. Y. '21
Rowe, George, Mine Captain, New Jersey Zinc Co.....	Franklin, N. J. '21
†Rowe, J. H., Mine Operator & Representative.....	Casilla 268, Oruro, Bolivia. '24
Rowe, William A., Chief Engr., American Blower Co.....	6004 Russell St., Detroit, Mich. '26
Rowen, Robert W., Bunker Hill & Sullivan Min. & Conc. Co.....	Kellogg, Idaho. '28
†Rowland, W. Boyd.....	Address Wanted. '27
Roy, H. G. ....	New Lexington, Ohio. '22
Royce, Stephen, Min. Engr. & Geol., Pickands, Mather & Co.; Judson Min. Co., Box 787, Crystal Falls, Mich.	'09
Royer, Frank W., Min. Engr.....	Roosevelt Bldg., Los Angeles, Cal. '18
Ruark, Arthur Edward, Physicist, Research Lab. of Gulf Oil Cos.; Fellow, Mellon Inst.; Lecturer in physics, Univ. of Pittsburgh, Pittsburgh, Pa.	'29
†Rubel, Albert C., Pet. Engr., Union Oil Co. of California, Union Oil Bldg., Los Angeles, Cal.	'20
†Rubert, C. D., District Supt., Lehigh Coal & Navigation Co.....	Lansford, Pa. '20
Rubidge, Frederick T., Min. Engr.....	Mountain Lakes, N. J. '13
Rubly, Grant Russel.....	Box 505, Miami, Ariz. '28
Rudderow, William V.....	Box 482, Hollywood, Cal. '24
Ruder, William E., Met. Engr., General Electric Co.....	Schenectady, N. Y. '17
Ruedemann, Paul, Geol. & Appraisal Engr., Assoc. with Ralph E. Schen, 208 Tulsa Trust Bldg., Tulsa, Okla.	'21
Ruetschi, R., Plant Engr., The Mathieson Alkali Wks.....	Box 98, Saltville, Va. '91
Ruggles, Guy H., Mill Supt., Inspiration Cons. Copper Co.....	Box 159, Inspiration, Ariz. '09
Ruhl, Otto, Cons. Min. Engr.....	201 Miners Bank Bldg., Joplin, Mo. '17
Ruhm, H. D., Chem. & Min. Engr., V.P., Ruhm Phosphate & Chem. Co., 2300 Willoughby Tower, Chicago, Ill.	'20
Ruhnke, D. H., Engr., Mahr Mfg. Co.....	Minneapolis, Minn. '25
RuKeyser, Walter A., Cons. Min. Engr. & Geol.....	342 Madison Ave., New York, N. Y. '17
†Rule, Floyd Clark, Asst. Supt., New Haven Copper Co.....	Seymour, Conn. '29
Rumbold, William R., Min. Engr., Dir. & Partner in Firm, Laws, Rumbold & Co., Ltd., 829 Salisbury House, London, E.C.2, England.	'06
Runge, Walter, Chem. Engr., Head, Low Temperature Carbonization Dept., International Combustion Engrg. Corp., 200 Madison Ave., New York, N. Y.	'27
Runge, William Henry, V.P. & Gen'l Mgr., Alabama Marble Co.....	Gantts Quarry, Ala. '21
Runkle, Karl H., Mgr. of Sales, Industrial Dept., General Electric Co., Schenectady, N. Y.	'27
Rupp, George H., Colorado Fuel & Iron Co.....	Pueblo, Colo. '27
Rupprecht, F. N., Asst. Colliery Supt., Glen Alden Coal Co., Truesdale Colliery, Nanticoke, Pa.	'21
Rushmore, David B., Elec. Engr., The University Club, Fifth Ave. & 54th St., New York, N. Y.	'07
Russ, Leon F., Geol.....	3606 Princeton Ave., Dallas, Tex. '17
Russel, Walter S., Capitalist.....	Room 1349, Free Press Bldg., Detroit, Mich. '86
Russell, Alexander G., Jr., Land Agent, Pocahontas Fuel Co. & Pocahontas Corp., Tazewell, Va.	'15
†Russell, Cyril H., Asst. Milling Supt., Chosen Syndicate, Ltd., Taiyudong, Chosen, Korea.	'29
Russell, David A., Chief Chem., The Youngstown Sheet & Tube Co., Youngstown, Ohio.	'26
Russell, Donato L., Engr., The Texas Co.....	565 W. 113th St., New York, N. Y. '25
Russell, George Alexander Vincent, Engr. in charge Rolling & Entrusion, Imperial Chemical Industries, Ltd., Metal Group Cos., Witton, Birmingham, England.	'23
Russell, John.....	512 26th St., Moline, Ill. '20
Russell, N. F. S., Pres., United States Cast Iron Pipe & Fdry. Co.....	Burlington, N. J. '27
Russell, William, Met. Engr., "Sandyhills," Blackborough Rd., Reigate, Surrey, England.	'02
Russell, William Francis, Mngng. Dir., Isaac G. Johnson & Co., Spuytten Duyvil, New York, N. Y.	'24
†Russell, William L.....	430 Temple St., New Haven, Conn. '25
†Russert, Walter R. C., Asst. Foreman, Anaconda Copper Min. Co.....	Butte, Mont. '26

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†Russom, Vaughn W., Field Geol., Sinclair Oil & Gas Co., Union Nat'l Bank Bldg., Wichita, Kans.	'25
Rust, Henry B., Pres., The Koppers Co., 1500 Koppers Bldg., Pittsburgh, Pa.	'14
Rustam, N., .....Glen Ferris, W. Va.	'26
Rusterholz, R. W., Chairman & Mngng. Dir., Ingersoll-Rand Co. (S. A.), Ltd., Box 1809, Johannesburg, Transvaal, S. Africa.	'14
Ruth, Joseph P., Jr., The Ruth Co., 341 Continental Oil Bldg., Denver, Colo.	'17
Rutherford, Forest, Cons. Min. & Met. Engr., Room 1242, 50 Broad St., New York, N. Y.	'00
Rutherford, William P., Min. Engr., Tharsis Sulphur & Copper Co., Glasgow, Scotland.	'09
Rutledge, John J., Chief Min. Engr., Maryland Bureau of Mines, 22 Light St., Baltimore, Md.	'05
Rutledge, Walter E., Pres., Rutledge & Taylor Coal Co., 1037 Boatmens Bank Bldg., St. Louis, Mo.	'21
†Ryan, Christopher W., .....408 Law Bldg., Lynchburg, Va.	'22
Ryan, Frank C., Staff Engr., Johns-Manville Corp., 41st & Madison Ave., New York, N. Y.	'26
Ryan, George Andrew, Sales Engr., Ingersoll-Rand Co., .....Phillipsburg, N. J.	'28
†Ryan, J. P., Geol., Ross & Ryan, .....Box 883, Wichita, Kans.	'20
†Ryan, John C., V.P., The Montana Power Co., 40 E. Broadway, Butte, Mont.	'20
Ryan, John D., Pres., United Metals Selling Co., 25 Broadway, New York, N. Y.	'05
Ryan, John T., V.P. & Gen'l Mgr., Mine Safety Appliances Co., Braddock Ave. & Thomas Blvd., Pittsburgh, Pa.	'20
Ryan, Rhys Evans, Sales Engr., M. H. Treadwell Co., 140 Cedar St., New York, N. Y.	'24
Ryan, Russell Fossler, Asst. Chief Geol., Vacuum Oil Co., Crude Oil Dept., Esperson Bldg., Houston, Tex.	'26
Rydell, Herbert G., Braden Copper Co., .....Rancagua, Chile.	'23
Rys, C. F. W., Met. Engr., Asst. to Pres., Carnegie Steel Co., 517 Carnegie Bldg., Pittsburgh, Pa.	'13
Saben, William M., Asst. Mgr., Morenci Branch, Phelps Dodge Corp., .....Morenci, Ariz.	'20
Sabin, Alfred B., Asst. Mill Supt., El Tigre Min. Co., El Molino, Son., Mexico, Via Douglas, Ariz.	'27
†Sabin, Dewey J., .....Box F, Wallace, Idaho.	'21
Sacket, Charles T., Civ. & Min. Engr., .....Livingston, Mont.	'11
Sackett, Blair L., Gen'l Supt., International Smelt. Co., .....Tooele, Utah.	'19
Sada, Pablo M., American Smelt. & Refin. Co., Monterrey Plant, Apt. 101, Monterrey (N. L.), Mexico.	'28
Sadler, James V., V.P. & Asst. Mgr., Union Assay Office, Inc., Box 1446, Salt Lake City, Utah.	'27
†Sadow, Sigmund J., Asst. Engr., N. Y. Central R. R. Co., Room 966, 466 Lexington Ave., New York, N. Y.	'21
Sadtler, Chester B., Barber Colman Co., .....Rockford, Ill.	'26
Sagawa, Eijiro, Min. Geol., Mitsui Min. Co., No. 1, Surugacho, Nihonbashiku, Tokyo, Japan.	'20
†Sage, Merton W., Pennie, Davis, Marvin & Edmonds, 165 Broadway, New York, N. Y.	'23
St. Clair, Stuart, Cons. Geol., 420 Lexington Ave., New York, N. Y.	'17
St. Germain, Raymond J., Oil Producer, 804 Wright Bldg., Tulsa, Okla.	'18
St. John, Ancel, Cons. Physicist, 162 Harris Ave., Long Island City, N. Y.	'25
St. John, Harry M., Chief Met., Detroit Lubricator Co., 5342 Trumbull Ave., Detroit, Mich.	'24
Saint-Maurice, H., Smelter Supt., Cia. del Boleo, Santa Rosalia, Lower California, Mexico.	'28
Saint Paul de Sincay, Gaston, Administrateur-Directeur Général, Société Anonyme des Mines et Fonderies de Zinc de la Vieille Montagne, Chenée, Belgium.	'24
St. Vincent, Albert, Supt., Oliver Iron Min. Co., .....Box 1335, Hibbing, Minn.	'21
Sakikawa, Motaro, Min. & Met. Engr., 260, Shirogane Sankocho, Shibaku, Tokyo, Japan.	'02
Saklatwalla, B. D., V.P., Vanadium Corp. of America, .....Bridgeville, Pa.	'19
Sale, Clarence M., Dist. Geol., Atlantic Oil Producing Co., 510 Security National Bank Bldg., Tulsa, Okla.	'26
Sales, Reno H., Min. Engr., Chief Geol., Anaconda Copper Min. Co., 526 Hennessy Bldg., Butte, Mont.	'02
Salisbury, Earl F., Gen'l Mgr., International Ore & Smelt. Co., Apt. 136, Saltillo, Coah., Mexico.	'27
Salisbury, George W., .....411 N. Emily St., Anaheim, Cal.	'14
Salisbury, O. J., Min. Engr., .....90 S. Oak Knoll Ave., Pasadena, Cal.	'15
†Salmon, Clarence P., Met., Rome Wire Co., .....Rome, N. Y.	'21
Salmon, H. S., Salmon & Cowin, Inc., .....705 Title Bldg., Birmingham, Ala.	'15
Salnikov, Ivan S., Pet. Engr., The Carter Oil Co., Exchange National Bank Bldg., Tulsa, Okla.	'25
Salsbury, Melford H., Mine Supt., Piermont Mines, Inc., .....Aurum, via McGill, Nev.	'26
Salsich, Le Roy, Min. Engr., V.P. & Gen'l Mgr., Oliver Iron Min. Co., 600 Wolvin Bldg., Duluth, Minn.	'03
†Samoyloff, Victor N., Patino Minés & Enterprises, Siglo XX, .....Llallagua, Bolivia	'27

For explanation of symbols, see page 5.



Sample, Mat, Mine Supt. Chile Exploration Co.....	Chuquicamata, Chile.	'20
Sampson, Edward, Geol., Princeton Univ.....	Princeton, N. J.	'29
Sampson, Ernest H. S., Min. Engr.....	Apt. Postal 4, Guanajuato, Gto., Mexico.	'22
Sampson, Joseph H., Benguet Cons. Min. Co.....	Box 10, Baguio, Benguet, P. I.	'27
†Sampson, Sigurd L.....	Box 143, Salt Lake City, Utah.	'26
Samuel, J. Moore, Met., Copper Queen Branch, Phelps Dodge Corp.....	Douglas, Ariz.	'16
Samuel, Snowden, Sec. & Treas., The American-Swedo Iron Co.,	Harrison Bldg., Philadelphia, Pa.	'30
Samwell, Nicholas, Min. Engr.....	Box 48, Tavoy, Burma, India.	'01
Sanchez, Richard M., Chief Engr., The Foundation Co.....	Lima, Peru.	'18
Sandberg, August.....	Box 535, Westmoreland, Cal.	'13
Sandberg, Edward, Student, California Inst. of Tech.....	Pasadena, Cal.	'26
Sanders, Bernard Hall, Min. Engr., Mgr. & Resident Engr., The Itabira Iron Ore Co., Ltd.,	Itabira do Matto Dentro, Minas Geraes, Brazil.	'11
Sanders, Cyril C., Cons. Min. Engr.....	2520 Broadway, San Francisco, Cal.	'14
Sanders, Marshall Thomas, Chem., Research Dept., Atlas Powder Co.....	Wilmington, Del.	'25
Sanders, W. Murray.....	Room 810, Dodge Bldg., 53 Park Pl., New York, N. Y.	'16
†Sands, John Woodbury, Research Engr., Physical Labs., Bayonne Works, The International Nickel Co., Oak St., Bayonne, N. J.		'25
Sandstrom, Charles O., Mech. & Structural Engr., Southwestern Engrg. Corp.,	2221 Hollingsworth Bldg., Los Angeles, Cal.	'25
Sanford, Chard O., Min. Engr.....	1001 Central Bldg., Los Angeles, Cal.	'17
Sanford, J. H., Jr., V.P., Engr. & Geol., Ground Water Dev., Guaranteed Water Engrg. Corp., 929 Park Bldg., Pittsburgh, Pa.		'20
Sanford, Joseph B.....	R.D.5, Box 85, Brattleboro, Vt.	'20
†Sanger, Alan Bridgman, Account Mgr., G. M. Basford Co.,	17 E. 42nd St., New York, N. Y.	'28
Saniter, Ernest Henry, Met., The United Steel Companies, Ltd.,	17 Westbourne Rd., Sheffield, England.	'28
Sappington, Chester Paul.....	Laverne, Okla.	'23
Saracino, Angelo J., Student, Pennsylvania State College.....	State College, Pa.	'28
Sargent, Fritz William, Chief Engr., American Brake Shoe & Fdy. Co.,	Box 367, Mahwah, N. J.	'12
Sargent, George W., Chem. & Met.....	205 E. Fairmont Ave., State College, Pa.	'89
Sargent, William D., Pres., Eastern Steel Castings.....	60 Park Place, Newark, N. J.	'96
Satchell, Ernest Arthur, Gen'l Supt., Lago Pet. Corp.....	Apt. 172, Maracaibo, Venezuela.	'27
†Sato, Shun-ichi, Rigakushi, Research Staff, Mitsubishi Research Lab.,	29 Kamifujimae-cho, Komagome, Hongo, Tokyo, Japan.	'25
†Satterley, R. G., Chief Engr., West Virginia Coal Co. of Missouri,	1406 Boatmens Bank Bldg., St. Louis, Mo.	'20
†Saul, Alan G. A., Civ. & Min. Engr.....	Municipal Hall, Rye, N. Y.	'27
Saunders, Henry W., Mill Creek Coal & Coke Co.....	Coopers, W. Va.	'14
†Saunders, Lowell W., Geol. & Pet. Engr., The Texas Co.,	216 Haberfelde Bldg., Bakersfield, Cal.	'21
Saunders, T. Skewes, Cons. Min. Engr.,	Avenida 5 de Mayo 10, Despache 28, Mexico City, D. F., Mexico.	'12
Saunders, Walter M., Analytical and Consulting Chemist,	20 Dewey St., Olneyville Sta., Providence, R. I.	'15
Saunders, William Lawrence, Chairman, Naval Consulting Board, 1915-1928; Chairman of the Board of Directors, Ingersoll-Rand Co., 11 Broadway, New York, N. Y.		'06
Sautter, John R., Engr. Corps., Youngstown Sheet & Tube Co., Buckeye Mine,	Nemacolin Club, Nemacolin, Green Co., Pa.	'28
Sauvajol, Pierre, Cons. Engr., Comptoir Lyon Alemand,	13, Rue de Montmorency, Paris, France.	'17
†Sauve, N. Bernard, Geophysicist, Creole Pet. Corp.....	Maracaibo, Venezuela.	'29
Sauveur, Albert, Howe Memorial Lecturer, 1924; Met. Engr., Prof. of Met.,	Harvard Univ., Rotch Bldg., Cambridge, Mass.	'92
Savage, Harlow D.....	200 Madison Ave., New York, N. Y.	'14
Savage, Harry K., Engr., The Federal Shale Oil Co.,	402 Continental Oil Bldg., Denver, Colo.	'27
Savage, John A.....	Duluth, Minn.	'19
Savage, John P., Gen'l Foreman, Upper Levels, Ojuela Mine, Cia. Minera de Penoles, S. A.,	Ojuela, Dgo., Mexico.	'21
Savenius, Oiva Ilmar, Control Engr., Nevada Cons. Copper Co.....	Ray, Ariz.	'28
Saville, Joseph H., Asst. Mgr., The Pyrites Co., Ltd.....	Box 1167, Wilmington, Del.	'20
Saville, W. G., Managing Partner, Torsion Balance Exploration Co.,	1029-31 Post Dispatch Bldg., Houston, Tex.	'29
†Sawamura, Hiroshi, Asst. Prof. of Met., Dept. of Min. & Met., Kyoto Imperial University,	Yoshida, Kyoto, Japan.	'23
Sawdon, W. A., Field Editor, <i>Oil Field Engrg.</i> ,	1812 Exchange Bank Bldg., Tulsa, Okla.	'29

# 130 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Sawyer, C. Baldwin, Pres., The Brush Laboratories Co., 3715 Euclid Ave., Cleveland, Ohio.	'23
Sawyer, Dwight L., Engr., Granby Cons. Min. Smelt. & Power Co., Ltd., Copper Mountain, B. C., Canada.	'20
Sawyer, Eugene M., Mgr., Burro Mt. Branch, Phelps Dodge Corp.....	Tyrone, N. M. '13
Sawyer, Roger W., Geol., Skelly Oil Co.....	Tulsa, Okla. '27
Saxman, Charles W., Min. Engr.....	119 N. Main St., Salt Lake City, Utah. '06
†Saxman, Harry S., Asst. Gen'l Mgr., Monarch Fuel Co., & Superior Fuel Co., Russellton, Pa.	'21
Saxman, M. W., Jr., Supt., Bradenville Coal & Coke Co., Latrobe Trust Co. Bldg., Latrobe, Pa.	'24
Saxman, P. Marseilles, Gen'l Mgr., The Saxman Coal & Coke Co.....	Somerset, Pa. '16
Sayeki, Yoshima, Dir., Mitsui Min. Co.....	1 Surugacho, Nihonbashi, Tokyo, Japan. '22
†Sayers, R. R., Chief Surgeon, U. S. Bureau of Mines, & Surgeon, U. S. Public Health Service, Dept. of Commerce, Washington, D. C.	'21
Sayre, J. H., United Verde Copper Co.....	Box 1520, Jerome, Ariz. '28
Sayre, Mortimer F., Assoc. Prof. of Applied Mechanics, Union College, Schenectady, N. Y.	'09
Sayre, Robert H.....	715 First National Bank Bldg., Denver, Colo. '13
Scaife, J. Verner, Pres., William B. Scaife & Sons Co.....	Oakmont, Pa. '01
Scalise, Victor B., Student, Columbia Univ.....	New York, N. Y. '27
Scallon, Edward P., Gen'l Supt., Clement K. Quinn Ore Co., 1500 Alworth Bldg., Duluth, Minn.	'20
†Scammell, Matthew J., V.P., Scammell Metal Lath Co.; Treas., Scammell China Co., Trenton, N. J.	'16
Scarfe, George O., Min. Engr.....	Edificio Olcese 320, Casilla 1985, Lima, Peru. '15
Schaaf, Downs, Met. Engr.....	1433 Studer Ave., Columbus, Ohio. '20
Schacht, W. H., Gen'l Mgr., Copper Range Co.....	Painesdale, Mich. '20
Schader, Carl F., Realtor.....	1828 Ocean Ave., Santa Monica, Cal. '03
Schaefer, Ernest F., Dir., Municipal Univ. of Akron.....	Akron, Ohio. '18
Schaefer, Frederick R., Niles Steel Products Co.....	Niles, Ohio. '14
†Schaefer, E. D.....	Room 1213, 90 West St., New York, N. Y. '27
Schagrin, Harry, Met.....	7018 Cregier Ave., Chicago, Ill. '22
†Schaill, W. M., South American Gulf Oil Co., Room 709, 21 State St., New York, N. Y.	'20
Schaller, Waldemar T., Mineralogical Chem., U. S. Geological Survey, Washington, D. C.	'20
Schapiro, Leo, Dept. of Met., South Wks., Illinois Steel Co.....	Chicago, Ill. '24
Schapiro, Morris A., Hoit, Rose & Troster.....	74 Trinity Pl., New York, N. Y. '23
Schapper, Rudolph C., Geol., Missouri State Highway Dept.....	Jefferson City, Mo. '20
Schaus, Oliver M.....	1208 Hanna Bldg., Cleveland, Ohio. '22
Scheble, Max C., Gen'l Supt. of Mines, The McAlester Fuel Co.....	McAlester, Okla. '11
Schell, Fred A., Jr., Geol. Engr., Tidal Oil Co.....	Tulsa, Okla. '28
Scheller, Ernest, Chief Chem., Reynolds Metals Co., U. S. Foil Div.....	Louisville, Ky. '29
Schenck, Peirce D., Pres., The Duriron Co., Inc.....	Dayton, Ohio. '24
Schenck, R. B., Met. Engr., Buick Motor Co.....	Flint, Mich. '20
Scherer, Morris C., Engrg. Dept., Nevada Consolidated Copper Co.....	Ruth, Nev. '24
Scheuch, William Allen, Met., Western Electric Co., Inc.....	Hawthorne, Chicago, Ill. '14
Schider, Rudolf, Geol., Production Mgr., Sarawak Oilfields, Ltd.....	Miri, Sarawak. '28
Schieferdecker, A. A. G., Diadema Argentina, Casilla de Correo 155, Comodoro Rivadavia, Argentina.	'21
†Schieren, Charles A., Mfr.; Pres., Charles A. Schieren Co., 34 Ferry St., New York, N. Y.	'16
Schilling, George W., Min. Engr., V.P. & Gen'l Mgr., Engrg. Service Corp., 1127 W. Washington St., Los Angeles, Cal.	'18
†Schilling, Henry William, Chief Control Chem., The Flintkoke Co.....	Rutherford, N. J. '22
Schilowsky, I., Met. Engr.....	128 W. 84th St., New York, N. Y. '16
Schimmel, Alfred, Met., Hirsch, Kupfer & Messingwerke, A. G., Mertensstr. 1, Eberswalde, near Berlin, Germany,	'27
Schissler, John H., Met., Chief Chem., Cia. de Real del Monte y Pachuca, Pachuca, Hgo., Mexico.	'20
Schlapp, Herman H., Cons. Min. Engr. & Met., 360 Collins St., Melbourne, Vic., Australia.	'96
Schleicher, Henry M.....	c/o Mr. A. Schleicher, 32 Thornton St., Boston, Mass. '13
†Schlesinger, Edwin, Engr.....	80 Fanshaw Ave., Yonkers, N. Y. '26
Schloesser, A. R., Cons. Min. Engr.....	Guazapares, Chih., Mexico. '20
†Schloss, John Malcolm, Sales Engr., American Laundry Machinery Co., 1468 Main St., Buffalo, N. Y.	'17
Schmid, Charles F., Elect. Testing Engr., American Brass Co.....	Waterbury, Conn. '27
Schmidt, Caspar Anthony, Min. Engr., Supt., Hanover Mines, The Empire Zinc Co., Hanover, N. M.	'14
Schmidt, Herbert E.....	1522 E. 6th St., Duluth, Minn. '14
Schmidt, Theo. A., Min. Engr., Morris Run Coal Min. Co.....	Morris Run, Pa. '22
Schmidt, Walter A., Pres., Western Precipitation Co., 1016 W. 9th St., Los Angeles, Cal.	'16
Schmidt, William C., Jr., V.P. & Gen'l Mgr., Cia. Minera Rio Blanco, Ltd., Casilla 1857, Santiago, Chile.	'13

Schmitterlow, Carl E., Mech. Engr., T. An. Tesch.....	Stockholm, Sweden.	'20
Schmitt, Harrison, Min. Geol., Chief Geol., S. W. Div., New Jersey Zinc Co., Hanover, N. M.		'30
Schmucker, Robert A.....	545 Union St., Hudson, N. Y.	'16
Schneider, Albert F., Cons. Met. & Min. Engr., Engineers' Club, 32 W. 40th St., New York, N. Y.		'74
Schneider, William G., Min. & Met. Engr., Copper & Brass Research Assn., Room 1326, 25 Broadway, New York, N. Y.		'23
Schnerr, Leon H.....	130 Uhl Ave., Somerset, Pa.	'25
Schnitzel, Henry, Min. Engr.....	Lead, S. D.	'00
Schoeneck, William E. S., Student, Pennsylvania State College.....	State College, Pa.	'29
Scholl, Louis A., Jr., Cons. Geol., The Texas Co.....	Drawer F, Houston, Tex.	'16
Scholvien, Werner, Met. Engr., Ing. Buro Uhde.....	Castrop, Germany.	'26
Scholz, Carl, Raleigh Wyoming Min. Co.....	Charleston, W. Va.	'96
†Schonthal, B. E., Pres., B. E. Schonthal & Co., Inc., 224 S. Michigan Ave., Chicago, Ill.		'27
†Schooler, D. R., Min. Engr., Bell & Zoller Coal & Min. Co.....	Zeigler, Ill.	'28
Schotz, Henry H., Mill Supt., Cia. Minera Asarco, S. A., Charcas Unit, Charcas, S. L. P., Mexico.		'27
Schrader, Erich J., Cons. Engr.....	Box 244, Reno, Nev.	'06
Schrader, Frank C., Geol., U. S. Geological Survey.....	Washington, D. C.	'03
Schramm, E. F., Prof. of Geol., Morrill Hall, Univ. of Nebraska, Sta. A., Lincoln, Neb.		'20
Schraps, Paul C., Met., Gen'l Engrg. Co., Howey Gold Mines, Ltd., Western Canada Airways, Sioux Lookout, Ont., Canada.		'14
†Schreiber, Leonard G., V.P. & Gen'l Mgr., The L. Schreiber & Sons Co., Box 18, Evanston Station, Cincinnati, Ohio.		'18
†Schrock, Murl R., Ventilation Engr., Moctezuma Copper Co., Pitares de Nacozari, Son., Mexico.		'29
Schroter, G. Austin, Geol., The Empire Zinc Co.....	Hanover, N. M.	'29
Schroter, George A., Min. Engr.....	111 Broadway, New York, N. Y.	'04
Schubert, George P., Supt., Michigan Smelt. Co.....	Houghton, Mich.	'23
Schueler, J. L., Met., Continental Steel Corp.....	Kokomo, Ind.	'17
Schuette, Curt N., Min. Engr.....	306 Call Bldg., San Francisco, Cal.	'18
†Schuler, W. N., Northern Peru Min. & Smelt. Co.....	Trujillo, Peru.	'20
Schultz, Alfred Reginald, Geol., Pres., Willow River Power Co., 100 Locust St., Hudson, Wis.		'20
Schultz, Harry Cameron.....	544 Cathedral P'kway, New York, N. Y.	'19
Schultz, Louis C., Engr., Corp. Dept., Harris Trust & Savings Bank, 115 W. Monroe St., Chicago, Ill.		'26
†Schureman, Charles B., Dir. of Research, Eastern Clay Products, Inc., 614 Ellicott Square Bldg., Buffalo, N. Y.		'20
Schuricht, A. G., Chief Chem., Western Cartridge Co.....	East Alton, Ill.	'20
†Schurman, George Walter, Engr. & Surveyor, New Jersey Zinc Co.....	Franklin, N. J.	'20
Schutter, George David, The Lehigh Valley Coal Co.....	Hazleton, Pa.	'26
Schwab, Charles M., Chairman, Board of Directors, Bethlehem Steel Corp., 25 Broadway, New York, N. Y.		'91
Schwab, James W., Chem., Texas Gulf Sulphur Co.....	Gulf, Matagorda Co., Tex.	'22
†Schwab, Philip A., U. S. Gypsum Co.....	Alabaster, Mich.	'29
Schwabrow, John Robert, Jr. Pet. Tech., U. S. Geol. Survey....	Box 127, Shelby, Mont.	'27
Schwartz, Harry A., Met. Engr., Mgr. of Research, National Malleable & Steel Castings Co., 10600 Quincy Ave. S. E., Cleveland, Ohio.		'19
Schwartz, Harry J., The Armeo International, 64 Victoria St., London, S.W.1, England.		'20
Schwartz, Sven, Local Mgr., gold min. enterprise, Cie. Franco-Malgache d'Entreprises, Maevatanana, Madagascar.		'24
Schwarz, Charles E., Min. & Met. Engr., Cons. Engr., St. Louis Smelt. & Refn. Co., 812 International Life Bldg., St. Louis, Mo.		'02
Schweizer, Ernest, Physicist-Met., Celluloid Corp.....	290 Ferry St., Newark, N. J.	'26
Schwenn, Clifford W., Student, Ohio State Univ.....	Columbus, Ohio.	'27
Schwerin, Clarence M., Met., Pres., Vinton Colliery Co., 350 Madison Ave., New York, N. Y.		'01
†Schwerin, Lenher, Asst. to Mgr., Outwater, Schwerin & Barnett.....	Elizabethtown, Ill.	'27
†Sclater, Kenneth C., Editor, Oil & Gas Production, The Petroleum Engineer, Exchange Bank Bldg., Tulsa, Okla.		'19
Scott, Archie.....	Duarte, Cal.	'14
†Scott, Arthur I., Indian Copper Corp., Ltd., Ghatsila P.O., Dist. Singhbhum, Chota Nagpur, India.		'27
†Scott, G. M.....	107 N. Broadway, Santa Maria, Cal.	'21
Scott, G. S., Min. Geol.....	Box 1844, Timmins, Ont., Canada.	'21
Scott, Harry, Supt., London Arizona Cons. Copper Co.....	Hayden Junction, Ariz.	'20
Scott, Herbert K., Min. Engr.....	83 Queen Victoria St., London, E.C., England.	'00
Scott, Howard, Research Engr., Research Lab., Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.		'19



# 132 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Scott, J. Walter, Met. Engr., Hawthorne Wks., Western Electric Co.....	Chicago, Ill.	'28
Scott, O. N., Cons. Min. Engr., c/o Ontario Club, 18 Wellington St. W., Toronto, Ont., Canada.		'07
†Scott, Philip Boyer, Met. Engr., Nichols Copper Co.....	25 Broad St., New York, N. Y.	'24
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Scott, W. E., Jr., Min. Engr., Gen'l Supt., Argonaut Min. Co.....	Jackson, Cal.	'26
Scott, W. W., Chief Pet. Engr., Humble Oil & Refin. Co....	611 Humble Bldg., Houston, Tex.	'21
Scott, Walter G., Inspiration Consolidated Copper Co.....	Box 244, Inspiration, Ariz.	'20
†Scullin, Charles John.....	5222 Bancroft Ave., St. Louis, Mo.	'26
Scully, T. T., Civ. & Min. Engr., Scullys (Britain), Ltd., Broad Street House, New Broad St., London, England.		'20
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Seaman, Wyllys Arthur, Asst. Prof., Michigan College of Min. & Tech.....	Houghton, Mich.	'29
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†Searls, Carroll, Atty. at Law.....	14 Wall St., New York, N. Y.	'28
Searls, Fred, Jr., Geol.....	Room 1507, 14 Wall St., New York, N. Y.	'15
Sears, Mortimer A., Asst. Law Examiner, U. S. Gen'l Land Office, Dept. of Interior, Room 4326, Interior Bldg., Washington, D. C.		'03
Sears, Stanley C., Val. Engr., Treasury Dept., Income Tax Unit.....	Washington, D. C.	'07
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Seaver, Kenneth, Gen'l Sales Mgr., Harbison-Walker Refractories Co., 18th Floor, Farmers Bank Bldg., Pittsburgh, Pa.		'13
Sebenius, J. Uno, Supt. of Mineral Lands & Exploration, Oliver Iron Mining Co., Wolvin Bldg., Duluth, Minn.		'90
†Secor, Donald T., Geol., United Natural Gas Co.....	308 Seneca St., Oil City, Pa.	'28
Seeber, Rex Robert, Min. Engr., Prof., Mech. Engrg., Michigan College Min. & Technology, Houghton, Mich.		'02
Seestedt, Lloyd L., Romulus Gray Iron Foundry.....	Romulus, Mich.	'27
Segsworth, Walter E., Min. Engr. Room 606, Bank of Hamilton Bldg., 67 Yonge St., Toronto, Ont., Canada.		'08
Seguine, William, Jr., Krebs Pigment & Chem. Co.....	Newport, Del.	'25
Seibert, Percy A., Guggenheim Bros.....	Casilla 49-D, Santiago, Chile.	'12
Seidel, Julius J.....	Address Wanted.	'27
Seidell, L. R., Cons. Chem. & Met., Pres., New York Testing Laboratories, 80 Washington St., New York, N. Y.		'24
†Seifert, Edgar F., Asst. to the Pres., Standard Automatic Signal Corp., Suite 1600, Midland Bldg., 176 W. Adams St., Chicago, Ill.		'23
Seil, Gilbert Edward, Tech. Dir., E. J. Lavino & Co.....	Plymouth Meeting, Pa.	'30
Selchow, Donald H.....	Mount Kisco, N. Y.	'25
Selden, W. H., Jr., Min.....	Iron River, Mich.	'17
Selfridge, George, Jr., Cia. Minera de Plomo, S. A., Los Lamentos, via Lucero, Chih., Mexico.		'27
Seligman, A. J., Banker, A. J. Seligman & Co.....	61 Broadway, New York, N. Y.	'82
†Seligman, Arthur, The British Aluminium Co., Ltd., Chanin Bldg., Suite 1907, 122 E. 42nd St., New York, N. Y.		'18
Selkirk, W., Min. Engr., Selection Trust Bldg., Mason's Ave., Coleman St., London, E.C.2, England.		'00
Sellerier, Carlos, Chief, Technical Pet. Commission of Ministry of Industry, Commerce & Work, 4a-Carpio-92, Mexico City, D.F., Mexico.		'05
Sellner, Sydney S., Asst. Supt., Cia. Minera de Penoles....	Apt. 93, Torreon, Coah., Mexico.	'17
Simple, C. Carleton, Min. Engr., Guggenheim Bros., Calle Comercio 71, La Paz, Bolivia.		'18
Simple, John C., Min. Engr.....	311 Symons Bldg., Spokane, Wash.	'20
Simple, Robert A., Engr., J. L. Hammett Co.....	380 Jelliff Ave., Newark, N. J.	'14
Sen, Janshi, Dir., Lung-Yen Iron Min. Co., 8 Kiusuikin, Hsishuanmachuang, Peking, China.		'27
Senger, Richard Warren, Min. Engr., Gen'l Supt., American Smelt. & Refin. Co., Garfield, Utah.		'14
Sengier, Edgar, Mngng. Dir., Union Minière du Haut Katanga, 6-8 Montagne du Parc, Brussels, Belgium.		'20
Senior, Samuel P., Jr., Raybestos Co.....	Bridgeport, Conn.	'23
Senseman, William B.....	1047 Subway-Terminal Bldg., 417 South Hill St., Los Angeles, Cal..	'25
Serviss, Frederick LeVerne, Min. Engr. & Geol., Engrg. Geol., Purdue Univ., Lafayette, Ind.		'18
Sessinghaus, Gustavus, Min. Engr.....	541 Equitable Bldg., Denver, Colo.	'98
Setinsky, Jerry H., Works Mgr., Sweetwater Plant, U. S. Gypsum Co.....	Sweetwater, Tex.	'24

Severinghaus, Nelson, Quarry Supt., Consolidated Quarries Corp.	Lithonia, Ga.	'25
Severy, Clarence Luther, Cons. Geol.	816 Kennedy Bldg., Tulsa, Okla.	'12
Sexton, Clifford F., American Smelt. & Refin. Co.	Apt. 101, Monterrey, N. L., Mexico.	'24
Seydler, Frank K., Mech. Engr., Western Electric Co.	Hawthorne Sta., Chicago, Ill.	'27
Seymour, Morris E., Student, Univ. of North Dakota	Grand Forks, N. D.	'28
Shaler, Millard King, Min. Engr., Société Internationale Forestière & Minière du Congo,	40-42 Rue Royale, Brussels, Belgium.	'07
Shallcross, Vincent F., Min. Engr. & Co. Mgr.,	St. George's House, St. George's Tr., Perth, W. Australia.	'99
Shallenberger, J. F., Sec., Shallenberger Constr. Co.	1631-5 E. 6th St., Tulsa, Okla.	'21
Shaner, Lynton W., Jr. Engr., Braden Copper Co.,	c/o Braden Copper Co., Rancagua, Chile.	'28
Shankland, A. D., Supt., Open Hearth's 1 & 3, Bethlehem Steel Co.	Bethlehem, Pa.	'17
Shanks, D. W., Min. Engr.	1713 Russ Bldg., San Francisco, Cal.	'08
Shanks, John, Min. Engr., Gen'l Colliery Mgr., Brazeau Collieries, Ltd.,	Nordegg, Alta., Canada.	'17
Shannon, Philip Francis, Field Supt., Tropical Oil Co.	Apt. 170, Cartagena, Colombia.	'29
†Shannon, Randolph W., American Sheet & Tin Plate Co.,	Room 1201, 71 Broadway, New York, N. Y.	'27
†Shao, Chia Chin.	7 Iron Buddha Temple St., Anking, China.	'20
Shapira, Samuel, Stuart, James & Cooke.	c/o Donugol, Kharkov, U.S.S.R.	'27
Sharp, A. L.	Levack, Ont., Canada.	'14
†Sharp, Ernest H., Min. Engr., Maria Elena Camp, Anglo-Chilean Cons. Nitrate Corp.,	Casilla 17, Tocopilla, Chile.	'26
†Sharp, Melvin A., Min. Engr., Engrg. Dept., Union Pacific Coal Co.	Rock Springs, Wyo.	'28
Sharpless, F. F.	7 E. 42nd St., New York, N. Y.	'89
Sharwood, William J., Met. Chem.	869 Regal Rd., Berkeley, Cal.	'01
Shattuck, George Burbank, Special Representative, Senior V.P., Baltimore & Ohio R.R.,	Mt. Royal Sta., Baltimore, Md.	'23
Shaub, Benjamin M.	Hungerford, York Co., Pa.	'29
Shaver, Herbert H., Asst. Gen'l Sales Agent, The Hudson Coal Co.,	434 Wyoming Ave., Scranton, Pa.	'16
†Shaw, Douglas M., Engr., Moctezuma Copper Co.	Pilares de Nacozari, Son., Mexico.	'28
Shaw, Eugene Wesley, Cons. Geol.	81 New St., New York, N. Y.	'18
†Shaw, F. A. C., Met., National Lead Co.	Matawan, N. J.	'25
Shaw, Frederick M., Nichols Copper Co.	El Paso, Tex.	'20
Shaw, George A., Supt., Talache Mines, Inc.	Quartzburg, Idaho.	'25
Shaw, John E., Gen'l Mgr., Globe Pet. Co.	Apt. 1332, Tampico, Tamps., Mexico.	'18
†Shaw, John F., Electrical Prospector.	210 McGowen Ave., Houston, Tex.	'28
Shaw, Quincy A., Jr., Min. Engr.	21 Sears Rd., Brookline, Mass.	'23
Shaw, Quincy Adams.	14 Ashburton Pl., Boston, Mass.	'28
Shaw, S. F., Cons. Engr., The Carter Oil Co.	Tulsa, Okla.	'07
Shaw, William C., Cons. Coal Min. Engr.	631 Lumber Exchange Bldg., Seattle, Wash.	'23
Shea, John R., Asst. Engr. of Manufacture, Western Electric Co., Inc.,	100 Central Ave., Kearny, N. J.	'27
Sheafe, Harry J., Cons. Engr., Gen. Mgr., Argonaut Min. Co.	Jackson, Cal.	'02
Sheafer, Arthur W., Min. Engr., Geol.	Pottsville, Pa.	'80
†Sheafer, Theodore E., Portland Cement Association.	33 W. Grand Ave., Chicago, Ill.	'27
Shearer, Harold K., Geol., Standard Oil Co. of Louisiana.	Box 1739, Shreveport, La.	'13
†Shedd, Edward S., Min. Engr.	102 Plum St., Bolivar, N. Y.	'27
Shedd, Solon, Dept. of Geol., Stanford Univ.	Box 1888, Stanford University, Cal.	'01
†Shedden, John S., Dist. Mgr., The Permutit Co.	440 4th Ave., New York, N. Y.	'17
†Sheedy, John W., Ray Cons. Copper Co.	Hurley, N. M.	'21
†Sheeler, John Howard.	Instructed to hold everything.	'18
Sheldon, William W., Sheldon Oil Co.	205 Castle Bldg., Tulsa, Okla.	'27
†Shelton, Andrew R.	Jerome, Ariz.	'27
Shepard, Edward M., Pet. & Min. Geol.	1403 Benton Ave., Springfield, Mo.	'94
Shepard, Frank E., Mech. Engr., Supt., U. S. Mint.	Denver, Colo.	'15
Shepard, Hugh M., Supt., Copper Casting Dept., American Smelt. & Refin. Co.,	Maurer, N. J.	'19
†Shepard, O. Cutler, Acting Instructor in Min. & Met., Dept. of Min. & Met.,	Stanford Univ., Stanford University, Cal.	'27
†Shepherd, B. Franklin, Asst. Met., Ingersoll-Rand Co.	Phillipsburg, N. J.	'19
Sheridan, N. C., Cons. Min. Engr.	2209 S. Lincoln St., Spokane, Wash.	'17
Sherman, Gerald Fitzgerald, Min. Dept., Phelps Dodge Corp.,	Box 1064, Douglas, Ariz.	'03
Sherman, Hoyt, Oil Business, Asst. Gen'l Agent, Venezuela Gulf Oil Co.,	Apt. 234, Maracaibo, Venezuela.	'25
†Sherman, P. B., Jr., Malleable Plant Chem., American Radiator Co.	Buffalo, N. Y.	'20
Sherman, Scott H., Supt., Banning Preparation Plant, Pittsburgh Coal Co.	Van Meter, Pa.	'04

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Sherry, Homer K., Mine and Railway Supt., Canadian Johns-Manville Co., Ltd., Asbestos, Que., Canada.	'14
Sherwin, R. S., Chem. Engr., Aluminum Ore Co.....E. St. Louis, Ill.	'21
Sherwood, R. Hartley, Pres., Central Indiana Coal Co.; Sherwood Coal Co., 1016 Merchants Bank Bldg., Indianapolis, Ind.	'21
†Shiarella, N. W., Pet. Engr. & Geol., Creek Drilling Co., 905 Griffith Ave., Owensboro, Ky.	'20
Shibata, Tsutomu.....170 Aoyama-Harajuku, Tokyo, Japan.	'22
Shick, Henry.....Instructed to hold everything.	'26
Shimer, Oscar W., Chief Colliery Engr., Coal Brook Colliery, The Hudson Coal Co. Carbondale, Pa.	'27
Shimer, Porter W., Chem. & Met., Pres., Shimer Chem. Co., 94 Pennsylvania Ave., Easton, Pa.	'79
Shimer, W. R., Met. Engr., Bethlehem Steel Co.....Bethlehem, Pa.	'12
Shimmin, J. T., Mgr., Met. Division, Collins Western Corp., 517 Hollingsworth Bldg., Los Angeles, Cal.	'29
Shimono, Jiuro, Supt., Yoshima Coal Mines, Furukawa Min. Co., Ishikigun, Fukushimaken, Japan.	'20
Shinkle, Vincent G., Cons. Pet. Engr.....75 West St., New York, N. Y.	'20
Shipp, E. Maltby, Min. Engr., Lawrence Chamberlain & Co., 115 Broadway, New York, N. Y.	'05
†Shirley, H. V., Drilling Supt., Caribbean Pet. Co.....Maracaibo, Venezuela.	'26
†Shiverick, Charles.....26 E. 63rd St., New York, N. Y.	'27
Shoemaker, M. L., V.P., National Lead Co., S. A., San Martin 235, Buenos Aires, Argentina.	'26
Shoffstall, A. S., Gen'l Mgr., The International Nickel Co.....Huntington, W. Va.	'17
Shook, James W.....329 Brown Marx Bldg., Birmingham, Ala.	'00
Shoop, Walter M.....Hummelstown, Pa.	'13
Shores, E., Factory Mgr., American Smelt. & Refin. Co., 201 1st St., San Francisco, Cal.	'17
Short, W. Irwin, Prof. of Min., North Georgia Agricultural College.....Dahlonega, Ga.	'26
Shoup, Oliver H., Jr., V.P., Ophir-Colorado Mines Co., 519 Exchange National Bank Bldg., Colorado Springs, Colo.	'26
Showalter, W. W., Mill Supt., Utah Apex Min. Co.....Bingham Canyon, Utah.	'28
Shriver, Ellsworth H., Supt. of Construction, Coal Dept., The American Rolling Mill Co., Nellis, W. Va.	'17
Shugert, J. L., Geol.....Room 20, Dorothy Block, E. Granite St., Butte, Mont.	'21
†Shultz, J. Duval, New River & Pocahontas Cons. Coal Co.....Thayer, W. Va.	'26
†Shumway, Frederick Weston, Geol. & Pet. Engr....4427 North Hermitage Ave., Chicago, Ill.	'24
Shurick, Adam T., Cons. Min. Engr.....342 Madison Ave., New York, N. Y.	'04
Shuster, Elwood D., Engr. in charge Surveying Dept., New Jersey Zinc Co. of Pa. Franklin, N. J.	'18
Shutts, Arthur B., Asst. Supt., Old Forge Colliery, Pennsylvania Coal Co.....Old Forge, Pa.	'11
†Shutts, W. C., Pet. Engr., Pet. Engrg. Dept., Humble Oil & Refin. Co.....Houston, Tex.	'29
Sibbett, George E., Gen'l Mgr., Pacific States Cast Iron Pipe Co.....Box 18, Provo, Utah.	'26
Sibbey, Donald L., Preparation Div., Pittsburgh Coal Co.....Pittsburgh, Pa.	'26
Sickel, H. B. Allen.....2195 Fairfax Rd., Columbus, Ohio.	'27
Sides, C. E., General Contractor.....229 Exeter Pl., St. Paul, Minn.	'26
†Sidley, William D., Foreign Sales Mgr., New York Sullivan Machinery Co., 30 Church St., New York, N. Y.	'29
†Sidwell, Carroll V., Amerada Pet. Corp.....Box 547, Seminole, Okla.	'27
Siebenshal, C. E., Geol.....Instructed to hold everything.	'12
Siebenshal, Tait E., Gen'l Mgr., York Iron Min. Co.....Nashwauk, Minn.	'29
Sieber, Adolf, Min. Engr. & Gen'l Mgr., Gold Mines, Mica-Ruda, 12 A Postoli, Brad, Jud., Hunedoara, Romania.	'28
Siebert, Frederic J., Min. Engr.....Savoy Park, White Plains, N. Y.	'02
Siedler, Philipp C. H., Head of Flotation Dept., I. G. Farbenindustrie Aktiengesellschaft, Frankfurt A. M., Griesheim, Germany.	'29
Sieg, William W., Met., Titan Brass Mfg. Co.....Bellefonte, Pa.	'23
Sieger, George N., V.P., Elkon, Inc.....350 Madison Ave., New York, N. Y.	'20
†Siegfus, Stanley S., Asst. Geol., Shell Oil Co.....405 Haberfelde Bldg., Bakersfield, Cal.	'27
Sielaft, G. J., Chief Geol., Southern Pacific Co.....65 Market St., San Francisco, Cal.	'25
Siewers, E. R., U. S. Surveyman, Chief of Party, U. S. Government, 1224 Texas Ave., Woodward, Okla.	'27
Sievert, G. E., Ceramic Engr., Eljer-California Co.....4100 Alameda St., Los Angeles, Cal.	'23
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Sill, Rush T., Cons. Engr. of Mines.....634 S. Spring St., Los Angeles, Cal.	'19
Sillars, Daniel, Met. Chem...."Bidston," Britannia Tr., Saltburn-by-Sea, Yorkshire, England.	'17
Sillcox, Lewis K., Asst. to Pres., The New York Air Brake Co., E. Wks....Watertown, N. Y.	'20
Silliman, Arthur P., Min. Engr. & Chem., Operator of Diamond and Churn Drills, Hibbing, Minn.	'98
Silliman, W. A., Min. Engr.....88-94 Altoona Trust Bldg., Altoona, Pa.	'21

For explanation of symbols, see page 5.



Silsbee, John A., Pet. Engr., Cons. & Chief Engr., Producers Royalty Corp., 9th Floor, Palace Bldg., Tulsa, Okla.	'25
Silver, Albert, Cons. Min. & Met. Engr.	'18
Silvester, G. E., Min. Engr.	'13
Simenstad, Charles, Cons. Min. Engr.	'03
Simkins, William A., Min. Engr.	'13
Simonds, Francis M., Min. Engr.	'16
Simons, Theodore, Prof., Min. Engrg., Montana State School of Mines	'83
†Simonson, Elmer H.	'13
†Simpkins, L. D., Box 27, San Francisco Mines of Mexico, Ltd., San Francisco del Oro, Chih., Mexico	'23
†Simpson, George N., Pres., Car-Dumper & Equipment Co., 5842 Stony Island Ave., Chicago, Ill.	'19
Simpson, K. M., Cons. Engr.	'18
†Simpson, Richard E., Min. & Elec. Engr., Travelers Insurance Co., 120 Broadway, New York, N. Y.	'11
Simpson, William Fisher, Min. Engr., Asst. Supt., Canadian Johns-Manville Co., Ltd., Asbestos, Que., Canada	'21
Sinclair, Joseph H., Min. Geol., Brown Bros. & Co.	'30
Sinclair, W. E., Min. Engr., Anglo-Nigerian Tin Mines, Ltd., Steam Shovels, P.O. Jos., Northern Nigeria, British West Africa	'20
Singer, William A., Pres., Apex Smelt. Co.	'26
Singewald, Joseph T., Jr., Geol., Prof., Economic Geol., Johns Hopkins Univ., Baltimore, Md.	'23
†Singewald, Quentin Dreyer, Asst. Prof. of Geol., Univ. of Rochester	'12
Singmaster, J. A., Met. & Chem. Engr., Singmaster & Breyer, Met. & Chem. Engrs., Graybar Bldg., 420 Lexington Ave., New York, N. Y.	'23
Singstad, Ole, Chief Engr. & Supt., New York & New Jersey Bridge & Tunnel Commission, Holland Tunnel Administration Bldg., Canal & Varick Sts., New York, N. Y.	'13
Sinn, A. Henri	'25
Sinn, Francis P., Asst. to V.P., The New Jersey Zinc Co., 21 Rue Treilhaid (8 ème.), Paris, France	'00
Sinsheimer, Warren A., Land & Oil Production Dept., Henry L. Doherty & Co., 160 Front St., New York, N. Y.	'11
Room 1201, 60 Wall St., New York, N. Y.	'21
Sirelschikov, Innokenty A., South Dakota State School of Mines	'29
Sisco, Frank T., Chief, Met. Lab., U. S. Army Air Corps	'20
Sisler, James D., Assoc. Geol. & Min. Engr., Topographic & Geol. Survey of Pennsylvania, Harrisburg, Pa.	'28
†Sistermans, Frank, Min. Engr., Cia. Ingersoll-Rand	'21
Sivyer, Leonard D., Cons. Min. Engr. & Geol.	'14
Sizer, Frank L., Cons. Min. Engr.	'00
Skeahan, Thomas J., Min. Engr.	'27
Skeels, Frank H., Supt., Hughesville Div., St. Joseph Lead Co.	'25
Skeels, Walter Simeon	'24
Skidmore, Joseph Hansel, Oregon Copper Co.	'26
Skillings, D. N., Business Mgr., <i>Skillings' Min. Review</i> , 319-20 Bradley Bldg., Duluth, Minn.	'20
Skillman, Verne, Chief Met., Bohn Aluminum & Brass Corp., 2512 E. Grand Blvd., Detroit, Mich.	'13
Skinner, Edmond N., Min. Engr.	'03
Skinner, Louis V., County Engr.	'28
Skinner, Orville Campbell, Met. Engr., Works Mgr., Standard Steel Works Co., Burnham, Pa.	'98
Skirvin, O. W.	'21
Skoblin, B. J., International Smelt Co.	'25
Skogmark, John, Cons. Engr.	'14
Skokan, George P., Engr., The New Jersey Zinc Co.	'25
Skotchinsky, Alexander A., Prof., Min. Engrg., Mining Inst., Apt. 15, Leningrad, U.S.S.R.	'25
Skouger, H. E., Cons. Engr.	'20
Skowronski, Stanislaus, Research Chem., Raritan Copper Works	'14
Slayden, Hugh L., Engr., H. R. Slayden Co.	'26
Slee, William E.	'11
Sleeman, H. R., Min. Engr., Pilbara Copper Fields, Ltd. & others, 69 St. George's Tr., Perth, W. Australia	'05
Slichter, Louis Byrne, Geophysicist, Mason, Slichter & Gauld	'28
Slosson, Henry Lawrence, Jr., Min. Engr.	'12
Smail, James A., Met., Republic Iron & Steel Co.	'19
Small, Charles E., Student, Univ. of Idaho	'28
Small, Walt. M., Field Mgr., Cia. de Petroleo de Angola, Caxia Postal No. 315, Loanda, Angola, P. W. Africa	'17

# 136 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Smalley, Oliver, Medal, London Univ., Aug., 1914; Met. & Cons. Engr., Miramar Hotel, Apt. 404, The Boardwalk, Brighton Beach, Brooklyn, N. Y.	'19
Smart, Ornan B., Chief Engr., The Foundation Co.....Edificio Weise, Lima, Peru.	'18
Smeddle, John.....Washington Dr., Fontana, Cal.	'28
Smiley, John B.....1046-48 San Diego Trust & Savings Bldg., San Diego, Cal.	'23
Smirnoff, Theodor V., Met. Engr.....155 Downey St., San Francisco, Cal.	'18
Smith, Acheson.....Box 616, Niagara Falls, N. Y.	'20
Smith, Albert William, Gen'l Supt., Campbell Wks., Youngstown Sheet & Tube Co., Youngstown, Ohio.	'19
†Smith, Arthur, Gen'l Mgr.....East Ely, Nev.	'14
Smith, Bert F., Asst. Mgr., Premier Min. Co., Ltd.....Premier, B. C., Canada.	'14
Smith, C. A., Valuation Engr., Hope Natural Gas Co., 1006 Peoples Natural Gas Bldg., Pittsburgh, Pa.	'14
Smith, C. H., Central Public Service Co.....105 W. Adams St., Chicago, Ill.	'21
Smith, C. T., Sec. & Treas., Missouri Cobalt Co.....Fredericktown, Mo.	'17
Smith, Cabanne.....4334 Westminster Pl., St. Louis, Mo.	'20
†Smith, Carlos Bjerck, Sales Engr., Coen Co.....50 Church St., New York, N. Y.	'27
Smith, Carroll C., Met. Research, E. I. duPont de Nemours & Co., Inc., Box 525, Wilmington, Del.	'25
Smith, Cecil W., Min. Engr.....831 2nd Ave. So., Minneapolis, Minn.	'14
Smith, Charles H., Pres., Charles H. Smith & Co., Engineers, Inc., 50 Broadway, New York, N. Y.	'10
Smith, Clair, Control Engr., Nevada Cons. Copper Co.....Ray, Ariz.	'29
Smith, Cloyde M., Research Assoc., Dept. of Min. Engrg., Univ. of Illinois, 214 Transportation Bldg., Urbana, Ill.	'28
†Smith, Cyril Stanley, Research Met., The American Brass Co.....Waterbury, Conn.	'28
†Smith, Donald Murgatroyd, Spectroscopic Investigator, British Non-Ferrous Metals Research Assoc., Central Lab., Birmingham Univ., England.	'28
Smith, Donald P., Asst. Prof. of Chem., Princeton Univ.....Princeton, N. J.	'20
Smith, Duncan, Cons. Engr., Minière Congo Orient, 204 Rue Royale, Brussels, Belgium.	'23
Smith, DuRay, Supt., Union Spring & Mfg. Co.....New Kensington, Pa.	'25
Smith, E. A. Cappelen, Cons. Met. Engr., Guggenheim Bros..120 Broadway, New York, N. Y.	'04
Smith, E. C., Asst. Supt., Central Alloy Steel Corp.....Canton, Ohio.	'25
Smith, E. Percy, Min. Engr.....15 William St., New York, N. Y.	'02
Smith, Earl McColloch.....Box 1824, Jerome, Ariz.	'29
Smith, Edwin K., Met., Research Engr., Stockham Pipe & Fittings Co., Birmingham, Ala.	'20
Smith, Edwin S., Jr., Student, Univ. of Oklahoma, School of Mines.....Norman, Okla.	'29
Smith, Erwin Weir, Pet. Engr.....2303 Esperson Bldg., Houston, Tex.	'19
Smith, Everett W., Engr.....72 E. 92nd St., New York, N. Y.	'23
Smith, F. G.....73 Woodside Ave., Waterbury, Conn.	'17
Smith, Frank J., Gen'l Supt. of Mines, Menominee Range, Oglebay, Norton & Co., Crystal Falls, Mich.	'22
Smith, Frank M., Smelter Dir., Bunker Hill & Sullivan Min. & Concentrating Co., 1117 Paulsen Bldg., Spokane, Wash.	'92
†Smith, Frank T. A., Mine Supt., National Copper Corp.....South Strafford, Vt.	'16
Smith, Franklin W., Min. Engr.....701 Center St., Redlands, Cal.	'03
Smith, Fred Dean, Civ. Engr.....Apt. 561, Tampico, Tamps., Mexico.	'28
Smith, George, "Tutanekai".....85 Muston St., Mosman, N. S. W., Australia.	'92
Smith, George Otis, Director, U. S. Geological Survey.....Washington, D. C.	'02
Smith, Gilbert, Gen'l Mgr. of Mines, Dunedin Coal Co., Inc.....Fayetteville, W. Va.	'23
Smith, Gilbert Lee.....7801 S. Avalon, Chicago, Ill.	'24
Smith, Gordon C., Min. Engr.....424 Idaho Bldg., Boise, Idaho.	'19
Smith, H. C., Resident Mgr., Allenby Plant, The Granby Cons. Min. Smelt & Power Co., Ltd., Allenby, B. C., Canada.	'28
†Smith, H. C., Pres., Old Dominion Min. Corp.....Crimora, Va.	'29
Smith, H. DeWitt, Min. Engr., Asst. Mngng. Dir., United Verde Copper Co., 111 Broadway, New York, N. Y.	'09
Smith, H. E., Engr. of Materials, New York Central Lines, 466 Lexington Ave. New York, N. Y.	'21
Smith, Harold B., Assayer, The Treadwell Yukon Co., Ltd., Wernecke, Y. T., Canada.	'28
Smith, Henry Boynton, Asst. Met., International Silver Co.....Meriden, Conn.	'16
Smith, Henry P.....1424 Laurel St., S. Pasadena, Cal.	'11
Smith, Herbert Wilson, Union Carbide & Carbon Corp., 30 E. 42nd St., New York, N. Y.	'20
Smith, Hoval Arnold, Min. Engr.....Box 722, Warren, Ariz.	'02
Smith, Howard D., Min. Engr.....120 Broadway, New York, N. Y.	'02
Smith, Howard L., Min. Engr., Chief Mineral Leasing Div., U. S. Geol. Survey, Washington, D. C.	'08
†Smith, Howard Peck, Mech. Engr., Joseph Dixon Crucible Co.....Jersey City, N. J.	'22

For explanation of symbols, see page 5.

Smith, Humphrey D., Asst. to the Pres., Ashland Coal & Coke Co., Majestic Collieries Co. & Pemberton Coal & Coke Co., Peery Bldg., Bluefield, W. Va.	'15
Smith, J. E.....c/o A. Williamson, 3209 Lawn Ave., Tampa, Fla.	'20
Smith, J. William, Cons. Engr., Pres., Syracuse Pulverizer Corp.....Syracuse, N. Y.	'81
Smith, James F., Met., Great Falls Reduction Dept., Anaconda Copper Min. Co., Great Falls, Mont.	'27
Smith, James H., Jr., Mgr., Tech. Div., Sales Dept., Atlas Powder Co., Wilmington, Del.	'15
†Smith, Lawrence E., Prod. Editor, Editorial Dept., <i>National Pet. News</i> , 904 World Bldg., Tulsa, Okla.	'24
Smith, Leigh L., Asst. in Tests, Bethlehem Steel Corp.....Johnstown, Pa.	'26
Smith, Levi, Pres., Big Lake Oil Co. & Santa Barbara Oil Co.....Texon, Tex.	'27
Smith, Lewis R.....110 West St., Attleboro, Mass.	'20
**Smith, Murray Clifford, Jr.....1216 John Jay Hall, Columbia University, New York, N. Y.	'29
Smith, O. C., Mgr., Keasbey & Mattison Co.....Thetford Mines, Que., Canada.	'24
Smith, P. Bosworth, Lloyds Bank, Ltd., King's Branch, 6 Pall Mall, London, S. W., England.	'95
†Smith, Philip L., Mgr., Ore & Metal Dept., H. Hollesen, Inc., 17 Battery Pl., New York, N. Y.	'24
Smith, Philip S., Chief Alaskan Geol., U. S. Geological Survey.....Washington, D. C.	'18
†Smith, Pierce L., Min. Engr.....New York, N. Y.	'20
Smith, Richard A., State Geol., Michigan Geol. Survey, Dept. of Conservation, Lansing, Mich.	'20
Smith, Richard Raymond.....Address Wanted.	'19
Smith, Richard Wellington, Asst. State Geol., State Geol. Survey.....Atlanta, Ga.	'21
Smith, Robert C., Estimator, Carstensen & McLain.....301 Swank Bldg., Johnstown, Pa.	'25
Smith, Robert Harlow, Geol. Dept., Southern Crude Oil Purchasing Co.....Wink, Tex.	'25
Smith, Roscoe N., Min. Engr., New Cornelia Copper Co.....Ajo, Ariz.	'27
†Smith, Sibyl Walker (Mrs.).....1505 Yale Ave., Salt Lake City, Utah.	'21
Smith, Sumner S., Min. Engr.....5515 Dover St., Oakland, Cal.	'29
Smith, Sydney L.....7101 Colonial Rd., Brooklyn, N. Y.	'12
Smith, Veleair C., Geol.....170 Broadway, New York, N. Y.	'18
†Smith, W. Hinckle.....Bryn Mawr, Pa.	'14
Smith, W. R., Supt., Mineral Point Zinc Co.....Mineral Point, Wis.	'16
Smith, Walter C., Met.....Moylan, Pa.	'16
†Smith, Walton S., Asst. Supt., Metal & Thermit Corp.....Carteret, N. J.	'27
Smith, Warren S., Min. Geol., General Chem. Co.....40 Rector St., New York, N. Y.	'17
Smith, William Allen, Met. Engr.....74 Cony St., Augusta, Me.	'98
Smith, William N., Gen'l Mgr., Vinegar Hill Zinc Co. & National Zinc Separating Co., Platteville, Wis.	'16
Smoot, Albert M., Chem., Technical Director; Ledoux & Co., 99 John St., New York, N. Y.	'04
Smout, Arthur John Griffiths, Chief Works Mgr., Imperial Chemical Industries, Ltd., (Metal Group Cos.), Lion Wks., Witton, Birmingham, England.	'21
†Smullen, C. Kenneth, Engr., Oil & Gas Engine Dept., Ingersoll-Rand Co., 11 Broadway, New York, N. Y.	'17
Smyth, Harold M., Supt., The St. Clair Coal Co.....St. Clair, Schuylkill Co., Pa.	'15
Smyth, Henry L.....456 Belmont St., Watertown, Mass.	'90
Smyth, William I., Asst. Prof. of Met., Mackay School of Mines, Univ. of Nevada, Reno, Nev.	'29
Smythe, Hedley V., Min. Engr.....320 Euclid Ave., Syracuse, N. Y.	'01
Snell, Frank T., Min. Engr., Monolith Portland Midwest Co.....Box 23, Laramie, Wyo.	'28
Snell, L. W.....217 Patterson Pl., Alton, Ill.	'17
Snelling, Walter O., Cons. Engr., Research Chem., Trojan Powder Co., Hunsicker Bldg., Allentown, Pa.	'06
Snider, John Blaine, Met. Engr., Treasury Dept., Assay Office of the United States, 30-32 Wall St., New York, N. Y.	'21
Snider, L. C., Geol., Henry L. Doherty & Co.....60 Wall St., New York, N. Y.	'16
Snow, Charles Henry, Civ. & Min. Engr., Dean, School of Applied Science, New York University, University Heights, New York, N. Y.	'91
Snow, D. R.....Box 2033, Tulsa, Okla.	'22
Snow, Frederick Warren.....331 MacNeil St., San Fernando, Los Angeles Co., Cal.	'17
Snow, Frederick Willis, Min. Engr.....Room 2145, 25 Broadway, New York, N. Y.	'07
Snow, J. M., Min. Geol., Tintic Standard Min. Co., 1111 Walker Bank Bldg., Salt Lake City, Utah.	'28
Snow, Laurence E., Gen'l Foreman, Utah Apex Mine.....Bingham Canyon, Utah.	'28
†Snow, Leroy G., U. S. Dept. of the Interior, Geol. Survey.....Box 713, Thermopolis, Wyo.	'28
Snyder, B. M., Min. & Met. Engr., Gen'l Mgr. & Sec., Southwestern Engineering Co., 1221 Hollingsworth Bldg., Los Angeles, Cal.	'17
Snyder, Charles G., Chief Chem., Federated Metals Corp., Gross & Yew Sts., Pittsburgh, Pa.	'18
Snyder, E. H., Mill. & Min., Gen'l Mgr., Combined Metals Red. Co....Stockton, Utah.	'25
Snyder, Edward B., Min. Engr., Hazle Brook Coal Co.....Wilburton, Pa.	'26
Snyder, Grant, Mine Mgr., Yerington Malachite Copper Co. of Nevada, 824 No. Rampart Blvd., Los Angeles, Cal.	'19



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Snyder, Herman L., Asst. Supt., Leaching Dept., New Cornelia Copper Co., Box 273, Ajo, Pima Co., Ariz.	'13
Snyder, J. L. K., J. T. Baker Chem. Co.....North Broad St., Phillipsburg, N. J.	'27
Snyder, P. R., Met.....13 Finady Ave., Bethlehem, Pa.	'15
Snyder, T. E., V.P. & Gen'l Mgr., Hazle Brook Coal Co., 1106 Markle Bank Bldg., Hazleton, Pa.	'17
Snyder, W. Cordes, Supt., Pennsylvania Coal Co.....Scranton, Pa.	'19
Snyder, William P., Jr., Pres., The Shenango Furnace Co., Oliver Bldg., Pittsburgh, Pa.	'20
Soderberg, Olof A., Consul General.....Karlavagen 41, Stockholm 2, Sweden.	'20
†Sodoma, Joseph, Mahr Mfg. Co.....1728 2nd Ave. N., Minneapolis, Minn.	'28
Sohn, Erwin, Director of Research, Standard Sanitary Mfg. Co., 2801 Preble Ave., Pittsburgh, Pa.	'29
†Sohon, Julian A., Chem. & Bibliographer, Engrg. Societies Library, 29 W. 39th St., New York, N. Y.	'25
Sol, Leopoldo, Leopoldo Sol & Co.....Calle Cangallo 834, Buenos Aires, Argentina.	'17
†Solakian, Haig N., The Geometric Tool Co.....New Haven, Conn.	'20
†Soldatov, Vassily V.....15 Fort Washington Ave., New York, N. Y.	'26
Soler, Vicente Fernandez, Min. & Geol. Engr., Mgr., Fabrica de Ladrillos Industriales y Refractarios de Monterrey, S. A., Box 15, Monterrey, N. L., Mexico.	'23
Solomon, Frederick W.....851 Venezia Ave., Venice, Cal.	'14
†Seltis, John P., Min. Engr., Cerro de Pasco Copper Corp.....La Fundición, Peru.	'28
Solvay, Armand, Gérant de la Société Solvay et Cie., 33, Rue du Prince Albert, Brussels, Belgium.	'21
Somers, Ransom E., Prof. Econ. Geol., Geol. The Gulf Companies, Box 1214, Pittsburgh, Pa.	'14
Somerset, H. S., Gen'l Mgr., Electrolytic Zinc Co. of Australasia, Ltd., Collins House, Collins St., Melbourne, Vic., Australia.	'05
Sommerville, A. O., Penn. Coal & Coke Corp.....Patton, Pa.	'15
Sommerville, John S.....Bellefonte, Pa.	'19
†Sonneborn, Lawrence H., Research Met. Engr.....31 W. 10th St., New York, N. Y.	'20
Sonnemann, G. A., Cons. Min. Engr.....610 Washington St., Spokane, Wash.	'91
Soper, E. K., Geol.....845 Muirfield Rd., Los Angeles, Cal.	'09
Soper, Ellis, Cons. Engr.....17 E. 45th St., New York, N. Y.	'13
Soper, Ralph H., Mgr., Land Dept., Pan American Pet. & Transport Co., 122 E. 42nd St., New York, N. Y.	'15
Sordy, Harry, Supt., Alameda Mines Co.....Merlin, Ore.	'22
Sorensen, Paul M.....Box 561, Morenci, Ariz.	'25
Sorensen, S. Severin.....c/o Messrs. Yeatman & Berry, 165 Broadway, New York, N. Y.	'21
Sorenson, James, Met. Engr., Four Wheel Drive Auto Co.....Clintonville, Wis.	'20
†Sorenson, Robert E., Asst. Min. Engr., Hecla Min. Co.....Wallace, Idaho.	'27
Sosman, Robert B., Physical Chem., Research Lab., U. S. Steel Corp., Lincoln Highway, Kearny, N. J.	'29
Sostad, Andrew.....2565 W. 5th Ave., Vancouver, B. C., Canada.	'27
†Soto, Amador G., Captain of Artillery.....Cangas de Onis, Asturias, Spain.	'27
Souden, O. M., Chairman of Board of Directors, United States National Bank, 8th & Spring Sts., Los Angeles, Cal.	'27
Souder, Harrison, Cons. Engr.....27 Pine St., New York, N. Y.	'00
†Southers, R. P.....141 Howland Ave., Toronto, Ont., Canada.	'26
Soule, Andrew D., c/o New York & Honduras Rosario Min. Co., San Juancito, Honduras, C. A.	'28
Soupcoff, Samuel Magee, Min. Engr., American Smelt. & Refin. Co., McCornick Bldg., Salt Lake City, Utah.	'27
Southard, C. F., Min. Engr., Duquesne Coal & Coke Co., 347 Oliver Bldg., Pittsburgh, Pa.	'22
Soux H., Augusto, Empresa de Luz y Fuerza Electrica, Casilla de Correo 41, Potosí, Bolivia.	'20
†Sowerwine, E. O., Anaconda Copper Min. Co.....25 Broadway, New York, N. Y.	'16
Soyster, Hale B., Pet. Engr., Supervisor, Mid-Continent Dist., U. S. Geol. Survey, 416 Federal Bldg., Muskogee, Okla.	'28
Spalding, Henry A., Min. Engr.....Hazard, Ky.	'23
Sparks, Ben F., Min. Engr.....205 Ruby St., Houghton, Mich.	'28
Sparks, Harry E., Min. Engr., Cons. Engr. & Mgr., Oriole Mines, Ltd., Box 64, Haileybury, Ont., Canada.	'17
Spearman, Charles, Cons. Min. Geol. & Engr., Suite 1811-12, The Royal Bank Bldg., Montreal, Que., Canada.	'15
Speller, F. N., Met. Engr., National Tube Co.....1802 Frick Bldg., Pittsburgh, Pa.	'05
Spence, Hugh Sweyn, Min. Engr., Mines Branch, Dept. of Mines of Canada, Ottawa, Ont., Canada.	'28
†Spence, Kenneth F., Operating Engr., The Funkhouser Co.....Hagerstown, Md.	'29
Spencer, Alfred Charles, Jr., Lubrication Research Engr., Standard Oil Development Co., Elizabeth, N. J.	'26
Spencer, Arthur C., Geol., U. S. Geological Survey.....Washington, D. C.	'01

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†Spencer, Charles F., Pres., Pittsburg & Midway Coal Min. Co., 413-416 Globe Bldg., Pittsburg, Kans.	'21
Spencer, Cyril L., Asst. Chief Geol., Patino Mines & Enterprises, Inc., Siglo XX, Llallagua, Bolivia.	'26
Spencer, D. Porter, Met., Belle City Malleable Iron Co., & Racine Steel Castings Co., Racine, Wis.	'29
†Spencer, Frank E., Gen'l Mgr. of Sales, Pittsburgh Crucible Steel Co., Oliver Bldg., Pittsburgh, Pa.	'28
Spencer, Frank N., V.P., The New Jersey Zinc Co.....160 Front St., New York, N. Y.	'16
†Spencer, George LeRoy, Jr., Asst. Chief Met., American Zinc, Lead, & Smelt. Co., East St. Louis, Ill.	'28
Spencer, Henry Benning, Pres., Fruit Growers Express Co. & Western Fruit Express Co., Munsey Bldg., Washington, D. C.	'25
Spencer, Kenneth A., Charge of Engrg., Pittsburg & Midway Coal Min. Co., 416 Globe Bldg., Pittsburg, Kans.	'28
Spencer, Lawrence P., Dist. Geol., Phillips Pet. Co., Geol. Dept.....Wichita, Kans.	'27
Spencer, Leslie C.....Wallace, Neb.	'29
Spencer, Maria Frances (Miss) Graduate Asst., Univ. of Oklahoma.....Norman, Okla.	'28
Spencer, Marshall G., Electric Steel Castings Co., 1045 Main St., Speedway, Indianapolis, Ind.	'18
†Spencer, Nelson S., Lawyer.....72 Wall St., New York, N. Y.	'23
Sperr, Frederick W., Min. Engrg. Research.....315 Florence St., Houghton, Mich.	'82
Sperr, J. D., Min. Engr., Asst. Supt. of Constr., Arden Salt Co.....Newark, Cal.	'15
†Sperry, Arlo M., The Mexican Corp., S. A.....Fresnillo, Zac., Mexico.	'21
†Spice, William H., Jr., Asst. Chief Geol., Lago Pet. Corp., Apt. 172, Maracaibo, Venezuela.	'28
Spicer, Clarence W., V.P. & Chief Engr., Spicer Mfg. Corp.....South Plainfield, N. J.	'20
Spicer, H. N., The Dorr Co., Park-Lexington Bldg., 247 Park Ave., New York, N. Y.	'14
Spiers, James, Asst. Supt., Central Eureka Min. Co.....Sutter Creek, Amador Co., Cal.	'94
Spilsbury, H. G., Met. Engr., Oxalite Corp.....220 Westfield Ave., Roselle Park, N. J.	'18
Spilsbury, Persifor Gybbon, Min. Engr., Pres., Arizona Industrial Congress, Industrial Congress Bldg., Phoenix, Ariz.	'06
Spilsbury, Raymond, Smelter Supt., Cerro de Pasco Copper Corp.....Oroya, Peru.	'20
†Spindell, Stephen C., Structural Draftsman, McClintic-Marshall Constr. Co., 7749 Dante Ave., Chicago, Ill.	'22
Spittle, Arthur, Tech. Mgr., Allen Everitt & Sons, Ltd., Kingston Metal Works, Smethwick, Nr. Birmingham, England.	'26
Spofford, Howard N., Petroleum Geol.....3447 Coldwell St., Shreveport, La.	'21
Spooner, Albert P., Engr. of Tests, Bethlehem Steel Co.....Bethelhem, Pa.	'17
Spoor, Harry M., Cia. Español de Minas de Rif.....Melilla, Spanish Morocco.	'17
Spotswood, Alexander, Mine Supt., Rogers Tin Min. Syndicate.....Lincolnton, N. C.	'24
Spotswood, Dandridge, Cons. Engr.....Prunty Bldg., Clarksburg, W. Va.	'27
Spring, L. W., Chief Chem. & Met., Crane Co., 836 So. Michigan Ave., Chicago, Ill.	'18
Springer, Lewis Reese, Benguet Cons. Min. Co.....Box 10, Baguio, Benguet, P. I.	'27
Sproat, A. D.....73 W. 5th St., Chillicothe, Ohio.	'02
Spruance, W. C., V.P. in Charge of Prod. Dept., E. I. du Pont de Nemours & Co., 9056 du Pont Bldg., Wilmington, Del.	'19
Spry, Russell J., Met. Engr., The Dorr Co.....3241 Hanford St., Seattle, Wash.	'20
Spurr, J. Edward.....7 Edgewood Park, New Rochelle, N. Y.	'01
Squibb, R. D., Student, School of Mines, West Virginia Univ.....Morgantown, W. Va.	'28
Staats, Edward W.....Box 59, La Porte, Ind.	'24
Stabler, Herman, Chief, Conservation Branch, U. S. Geol. Survey.....Washington, D. C.	'27
Stack, F. L., Min. & Met. Engr., Federated Metals Corp., 2500 Woolworth Bldg., New York, N. Y.	'15
Stack, James R., Met., Nichols Copper Co.....El Paso, Tex.	'16
Stackhouse, Daniel Morrell, V.P., Cambria Iron Co.....Johnstown, Pa.	'09
Stadtmueller, Karl C., California Properties, Inc.....604 S. Western Ave., Los Angeles, Cal.	'15
Stahl, Charles Raymond, Div. Supt., C. C. B. Smokeless Coal Co.....Stotesbury, W. Va.	'14
†Stahl, George A.....1272 Columbine St., Denver, Colo.	'19
Stairs, D., Cons. Engr., Montreal Engineering Co., Ltd., 164 St. James St., Montreal, Que., Canada.	'21
Stackel, Charles J., Min. Engr.....Ishpeming, Mich.	'12
Stalder, Walter, Cons. Pet. Geol.....925 Crocker Bldg., San Francisco, Cal.	'15
Staley, W. W., Graduate Student in Met., Univ. of Idaho, 425 E. 3rd St., Moscow, Idaho.	'22
†Stanaway, Ray C., Min. Engr.....815 Empire St., Butte, Mont.	'26
Stanford, Homer R., Civ. Engr., Capt., C. E. C., U. S. Navy, 1735 Eye St. N.W., Washington, D. C.	'94
Stanford, James V., Northern Peru Min. & Smelt. Co.....Trujillo, Peru.	'25
Stanley, Charles, Engr., Sturrocks, Ltd.....Dock Rd., Cape Town, S. Africa.	'20

# 140 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Stanley, Robert C., Min. Engr., Pres., The International Nickel Co. of Canada, Ltd., 67 Wall St., New York, N. Y.	'02
Stanley, Wesley B., Mgr., Mina "La Clara".....Medellin, Colombia.	'23
Stannard, E. T., V.P., Kennecott Copper Corp.....Room 5, Pier 2, Seattle, Wash.	'20
Stansfield, Alfred, Prof. of Met., McGill University.....Montreal, Que., Canada.	'02
Stansfield, John, Assoc. Prof. of Geol., Washington Univ.....St. Louis, Mo.	'20
Stansmore, Keith C., Student, Colorado School of Mines.....Box 273, Golden, Colo.	'29
†Stanton, G. F., V.P., Baltimore Copper Mills.....Baltimore Md.	'28
Stanton, Vincent A., Rep., Mine Safety Appliances Co.....639 Ferndale Ave., Johnstown, Pa.	'24
Stanton, William Haldane, Student, Case School of Applied Science.....Cleveland, Ohio.	'28
Staples, Charron M., Min. Engr., Office Mgr., Morenci Branch, Phelps Dodge Corp., Morenci, Ariz.	'13
†Staples, Elton E.....Westport, Conn.	'26
†Staples, Guy W., Geol., Gypsy Oil Co.....Box 2044, Tulsa, Okla.	'26
Staples, Horace A., Cons. Engr., National Electric Products Corp.....Elizabeth, N. J.	'20
Staral, F. J., Jr., Cons. Min. Engr.....1275 W. 103rd St., Cleveland, Ohio.	'16
†Staritzky, Eugene, Met. Engr., The Dorr Co.....Westport, Conn.	'26
Starkey, Tom R.....Malvern, Natal, S. Africa.	'07
Starkweather, Herbert, Min. Engr.....Route 2, Edgewater, Colo.	'94
Starr, Charles C., Cons. Min. Engr.....Hume Hotel, Nelson, B. C., Canada.	'05
Starr, Clarence T., Stuart, James & Cooke.....Donugol, Kharkoff, U.S.S.R.	'19
Starr, George W., Min. Engr., Empire Mines.....Grass Valley, Cal.	'17
†Stasch, Franklin E., San Antonio Mines, Ltd.....Bissett, Man., Canada.	'24
Stathers, Silas C., Chief Geol., Standard Oil Co. of Louisiana.....Shreveport, La.	'19
Stauffer, Clinton R., Geol., Univ. of Minnesota....107 Pillsbury Hall, Minneapolis, Minn.	'21
Stauff, J. Lauer, Geol., International Pet. Co.....Negritos, via Talara, Peru.	'21
Staunton, William F., Min. Engr., V.P., Verde Central Mines, Inc., 517 I. W. Hellman Bldg., Los Angeles, Cal.	'83
†Stead, Henry Edward Francis, "The Overseas Club," Vernon House, Park Pl., St. James St., London, W.I., England.	'27
Stearn, Noel H., Geol. & Geophysical Engr., W. C. McBride, Inc., 704 Shell Bldg., St. Louis, Mo.	'28
†Stearns, Charles E., Certain-teed Products Corp.....505 Walnut Ave., Niagara Falls, N. Y.	'20
Stearns, E. C., Gen'l Mgr., Big Lake Oil Co.....Texon, Tex.	'28
Stearns, Thomas B., Engr. & Mfr., The Stearns Roger Mfg. Co., 1716 California St., Denver, Colo.	'89
Stebbins, Elwyn W., Cons. Min. Engr.....Mills Bldg., San Francisco, Cal.	'03
†Stebbins, Howard S., Salesman, The M. A. Hanna Co., 1300 Leader Bldg., Cleveland, Ohio.	'13
Stebinger, Eugene, Geol.....719 Edificio Banco Boston, Buenos Aires, Argentina.	'19
Stedman, W. A., The Dorr Co.....Westport, Conn.	'17
Stee, C. O.....No. 13 Denizay Apt., 254 S. 3rd E., Salt Lake City, Utah.	'17
Steel, Alvin A.....Route 1, Parma, Idaho.	'03
Steel, Donald, Min. Engr., Yukon Gold Co.....Kuala Lumpur, F. M. S.	'09
Steele, C. H., Geol., Anaconda Copper Min. Co.....526 Hennessy Bldg., Butte, Mont.	'16
Steele, Heath, Min. Engr., The American Metal Co., Ltd.....61 Broadway, New York, N. Y.	'22
Steele, J. W., Pet. Engr., Supervisor, U. S. Geol. Survey, 509 Consolidated Royalty Bldg., Casper, Wyo.	'27
Steese, James G., Gen'l Agent, South American Gulf Oil Co., Apt. 314, Cartagena, Colombia.	'28
Steese, Rollin C.....513 Stambaugh Bldg., Youngstown, Ohio.	'20
Steever, Adam M., Met. Engr., Great Lakes Forge Co.....1220 W. 119th St., Chicago, Ill.	'27
†Stefanides, Victor N., Met. Engr., Copper Plate Sheet & Tube Co., 511 Fifth Ave., New York, N. Y.	'24
Stehle, Carl, Engr., Mexican Seaboard Oil Co...Room 2907, 120 Broadway, New York, N. Y.	'30
Stehli, H. J. Met. Engr.....Box 35, Upper Montclair, N. J.	'07
Steidle, Edward, Dean, School of Mines & Met., Pennsylvania State College, State College, Pa.	'16
Steiger, George, Chem., U. S. Geological Survey.....Washington, D. C.	'95
Stein, Charles Marie, Mngng. Director, Charles M. Stein Co., 48 Rue de la Boetie, Paris, France.	'20
†Steiner, Carl A.....R. F. D. 1, Box 119, San Luis Obispo, Cal.	'27
Steinmesch, J. H., Asst. Supt., Desloge Cons. Lead Co.....Desloge, Mo.	'13
Stenger, Edward L., Resident Geol. & Chief Engr., Treadwell Yukon Co. Ltd., Errington Mines, Bradley, Ont., Canada.	'09
†Stephano, C. S., Min. Engr.....1014-16 Walnut St., Philadelphia, Pa.	'22
†Stephens, Edward Cecil, Jr., Geol., International Smelt. Co.....Box 426, Heber City, Utah.	'28
†Stephens, Henry Caldwell, Salesman, Caldwell & Stephens, 2900 Jacob St., Wheeling, W. Va.	'21
Stephens, Roderick, V.P., Stephens Fuel Co.....220 East 138th St., New York, N. Y.	'21
†Stephens, William Harold, El Paso Smelt. Wks.....El Paso, Tex.	'29

For explanation of symbols, see page 5.



Stephenson, Eugene A., Assoc. with Ralph E. Davis, 1710 Union Bank Bldg., Pittsburgh, Pa.	'28
†Stephenson, Thoris Layland, Mill Supt., Cia. Minera Explotadora de Promontorio, S. A., Chinacates, Dgo., Mexico.	'28
Sterling, Paul, Mech. Engr., Lehigh Valley Coal Co., 133 No. River St., Wilkes-Barre, Pa.	'11
Sterling, Robert, Colorado Mgr., Vanadium Corp. of America, 8 National State Bank Bldg., Boulder, Colo.	'14
Sterrett, Douglas B., 3945 Connecticut Ave., Washington, D. C.	'08
Stevens, Blamey, Mgr., Lane-Rincon Mines, Inc., Mina Rincon, via Toluca, Mexico.	'05
†Stevens, Byam K., Broker, 25 Broad St., New York, N. Y.	'24
Stevens, Clarence R., Student, Univ. of Oklahoma, Norman, Okla.	'28
Stevens, George R., Min. Engr., Head, Land & Geol. Dept., La. & Ark. Div., Simms Oil Co., 539 Ricou-Brewster Bldg., Shreveport, La.	'17
Stevens, Morton, Penna. Bldg., 15th & Chestnut Sts., Philadelphia, Pa.	'07
Stevenson, A. A., V.P. in Charge of Mfg., Standard Steel Works Co., 500 North Broad St., Philadelphia, Pa.	'89
†Stevenson, C. D., Min. Engr., Consolidated Min. & Smelt. Co. of Canada, Ltd., 706 Drummond Bldg., Montreal, Que., Canada.	'29
Stevenson, George E., Civ. & Min. Engr., 725 727 Connell Bldg., Scranton, Pa.	'11
Stevenson, John, Jr., Retired, 109 North Irvine Ave., Sharon, Pa.	'76
Stewart, Arthur B., Pres., The Davis Coal & Coke Co., 711 Continental Bldg., Baltimore, Md.	'27
Stewart, Benjamin D., Supervising Min. Engr., U. S. Geol. Survey & U. S. Bureau of Mines, Juneau, Alaska.	'26
Stewart, Blair W., Asst. Min. Engr., Anaconda Copper Min. Co., Water Co. Bldg., Butte, Mont.	'28
Stewart, C. H. E., Min. Engr., P. E. Hopkins, Cons. Min. Geol., 406-10 Bank of Hamilton Bldg., Toronto, Ont., Canada.	'26
Stewart, Chester F., Sales Engr., Sullivan Machinery Co., 45 Milk St., Boston, Mass.	'25
Stewart, Henry John, Min. Engr., Room 523, 190 St. James St., Montreal, Que., Canada.	'21
Stewart, Howard M., Surveyor & Min. Engr., Cerro de Pasco Copper Corp., Cerro de Pasco, Peru.	'24
Stewart, Howard R., 17 Battery Pl., New York, N. Y.	'97
Stewart, Hugh A., Chief Geol., Texas Production Co., Foster Bldg., Denver, Colo.	'14
Stewart, Irvine E., Chief Geol., The Texas Co., 1010 Texas Co. Bldg., 929 S. Broadway, Los Angeles, Cal.	'19
Stewart, John, Chairman, Mine Rating Commission, Norfolk & Western Ry. Co., Bluefield, W. Va.	'13
Stewart, John B., Min. & Met. Engr., c/o C. P. Davis, Room 3217, 535 5th Ave., New York, N. Y.	'04
Stewart, John S., 2711 Ashby Ave., Berkeley, Cal.	'16
Stewart, Karl Maris, Cerro de Pasco Copper Corp., Morococha, Peru.	'26
Stewart, Lincoln A., Min. Engr., Chrysolite, Ariz.	'20
Stewart, R. C., Div. Mgr., Prod. Dept., The Texas Co., Box 1737, Shreveport, La.	'19
Stewart, Robert H., Min. Engr., 736 Granville St., Vancouver Blk., Vancouver, B. C., Canada.	'05
Stewart, William H., Gen'l Supt., Central Indiana Coal Co., Box 205, Dugger, Ind.	'20
Stewart, William M., 110 E. 4th St., Joplin, Mo.	'21
Stickley, George W., Aluminum Co. of America, Massena, N. Y.	'25
Stickney, Alfred W., Min. Geol., 788 Mills Bldg., San Francisco, Cal.	'10
Stiefel, Fred W., Chief Engr., Rosoff Subway Constr. Co., 461 8th Ave., New York, N. Y.	'24
Stifel, Carl G., Pres., Pocahontas Min. Co., 3600 N. Broadway, St. Louis, Mo.	'15
Stiles, Thomas W., University Club, 5th Ave. & 54th St., New York, N. Y.	'99
Stille, F. Carroll, Dept. of Met. & Research, Field Service, National Tube Co., 71 Broadway, New York, N. Y.	'24
Stillman, Albert L., V.P., General Briquetting Co., 25 Broad St., New York, N. Y.	'19
Stimmel, B. A., Asst. Met., Cons. Min. & Smelt. Co., Trail, B. C., Canada.	'16
†Stimson, Louis A., Builder, Pacific Ready Cut Homes, Inc., for Dade & Broward Counties, Box 7634, Miami, Fla.	'19
Stines, Norman C., Cons. Min. Engr., 617 Metropolitan Bldg., Vancouver, B. C., Canada.	'06
†Stipp, Thomas F., Exploration Geol., Richfield Oil Co., 428 Richfield Oil Bldg., 555 S. Flower St., Los Angeles, Cal.	'21
Stock, Kurt, Met. Engr., Fish Creek, Wis.	'16
Stockdale, S. W., Chile Exploration Co., Chuquicamata, Chile.	'26
Stockdale, Thomas D., Electrical Mech. Engr., 1817 5th Ave. A. N., Lethbridge, Alta., Canada.	'20
Stockder, Hans J., Empire Zinc Co., Gilman, Colo.	'29
Stockett, Lewis, Ranchmen's Club, Calgary, Alta., Canada.	'81
Stockett, B. H., Gen'l Mgr., Weston, Dodson & Co., Inc., Pine Hill Coal Co., Minersville, Pa.	'18
Stockett, N. A., Mill Supt., Federal Mill, St. Joseph Lead Co., Rivermines, Mo.	'16
Stockett, Thomas R., Min. Engr., Gen'l Mgr., Spring Canyon Coal Co., Room 820, Newhouse Bldg., Salt Lake City, Utah.	'15

# 142 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Stockwell, R. K., British Engrg. Mgr., Robins Conveying Belt Co., Magnet House, Kingsway, London, W. C. 2, England.	'14
Stoddard, A. C., Chief Min. Engr., Inspiration Cons. Copper Co.....	'17
Stoddard, Xerxes T., Jr., The Braden Copper Co.....	'27
Stoddard, A. W., Min. Engr.....	'97
†Stoiber, L. A., (Mrs.).....c/o Fifth Ave. Bank of N. Y., 530 Fifth Ave., New York, N. Y.	'94
Stokes, Rupert O., Mech. Engr., The Dorr Co., London Office, 16 South St., London, E. C. 2, England.	'19
Stone, Edward C., Student, Mass. Inst. of Tech.....	'29
Stone, George C., Chief Met., N. J. Zinc Co.....	'80
Stoneham, Charles John, Pres. & Gen'l Mgr., Paragon Placer Mines.....	'28
Stoner, O. E., Pet. Geol.....	'20
Storgard, A. E., Oregon Agricultural College.....	'24
Storke, Arthur D.....	'26
Storm, Howard A., Sales Representative, Denver Dist. Office, Allis-Chalmers Mfg. Co., 222 Continental Oil Bldg., Denver, Colo.	'29
Storms, Frank Howard, Sales & Service Work, Ingersoll-Rand Co.....	'22
†Storms, W. R., Geological Staff, United Verde Copper Co.....	'22
Stortz, Frank J.....	'21
Stott, Charles E., Min. Engr., The American Metal Co., Ltd., 810 Mills Bldg., El Paso, Tex.	'25
Stott, George F., Supt., Bingham Prospect Min. Co.....	'21
Stotz, Norman I., Met. Engr., Braeburn Alloy Steel Co.....	'15
Stoughton, Bradley, <i>Howe Memorial Lecturer, 1927</i> ; Cons. Met., Lehigh Univ., Bethlehem, Pa.	'97
Stout, Charles E., Pet. Geol., Smith Pet. Co., 505-7 Building & Loan Bldg., Grand Rapids, Mich.	'29
Stout, D. A., Chief Engr. of Mines, Colorado Fuel & Iron Co.....	'27
Stout, H. H., Mech. Engr., c/o Phelps Dodge Corp.....	'16
Stout, Wilber, Asst. Geol., Survey of Ohio, Orton Hall, Ohio State University, Columbus, Ohio.	'17
Stover, Cleve A., Copper Queen Branch, Phelps Dodge Corp.....	'27
†Stow, Marcellus H., Asst. Prof of Geol., Washington & Lee Univ., Box 841, Lexington, Va.	'26
Stowell, George E., The Quicksilver Syndicate.....	'16
Stowell, William Henry, Jr., Chem. & Assayer, William H. Stowell & Co., 421 Sprague Ave., Spokane, Wash.	'19
Strable, George F., Student, Colorado School of Mines.....	'28
Strachan, Charles B., Gen'l Supt., American Zinc Co. of Tennessee.....	'16
Strachan, Francis J., Supt. of Concentrators, Cananea Cons. Copper Co., Cananea, Son., Mexico.	'15
Strader, K. H., Industrial Fellow, Mellon Inst.....	'25
Straitiff, C. H.....	'24
Stranahan, Daniel M., Peru Min. Co.....	'21
Strand, Karl A., Min. Engr., Nevada Cons. Copper Co., Chino Mines.....	'14
Straney, Thomas M., Control Engr.....	'28
Strang, William H., Oil & Gas, Deputy Supervisor, U. S. Geological Survey, 509 Consolidated Royalty Bldg., Casper, Wyo.	'30
Strange, Charles H., Supt., Haddock Min. Co.....	'20
Stratton, William C., Min. Engr.....	'09
Straub, Charles E., Pet. Geol., Appraiser & Income Tax Counsellor, 1102 Brown Bldg., Wichita, Kans.	'16
†Straus, Roger W., V.P., American Smelt. & Refin. Co.....	'16
Strauss, Jerome, Chief Research Engr., Vanadium Corp. of America.....	'21
Strauss, Lester W., Engr. of Mines.....	'00
Straw, Walter A., Western Electric Co., Inc.....	'26
Strawn, William M., Gen'l Mgr., Canyon Coal & Coke Co.....	'25
Street, Gerald B., Min. & Mech. Engr., Asst. Dir., Service Dept., E. I. du Pont de Nemours & Co., 7030 du Pont Bldg., Wilmington, Del.	'02
Strigeoff, John Nicolai, Prof., Chief Director, Pet. Industry of U.S.S.R., Supreme Council of National Economy, Delovoi Dvor, Moscow Center, U.S.S.R.	'28
Stringham, Joseph S.....	'09
Strobel, Landon F., Civ. & Min. Engr.....	'21
Strobel, Roger L., Dist. Mgr., Linde Air Products Co., 362 Pierpont St., Salt Lake City, Utah.	'18
Strobel, Victor O.....	'84
Strohbach, W. C., Sales Engr.....	'16
Stromborg, Oscar, Cons. Engr.....	'17
Strong, A. M., Cons. Engr.....	'19
Stroud, Ben K., Engr., National Tube Co., U. S. Steel Products Co., Box 510, Arcade Station, Los Angeles, Cal.	'22
Stroup, Jacob Carlton, Engr., Williamson Co.....	'27
†Stroup, Richard John, Min. Engr., Eagle-Picher Lead Co.....	'20

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†Stroup, Robert K., Engrg. Dept., Eagle-Picher Lead Co.....	Picher, Okla.	'19
Stroup, Thomas A., Chief Engr., West Virginia Coal & Coke Co.....	Box 231, Omar, W. Va.	'16
Strout, Ernest A., Gen'l Mgr., San Francisco Mines of Mexico, Ltd.,		
	San Francisco Del Oro, Chih., Mexico.	'16
†Strowger, A. W., Tax Agent.....	1412 Northwestern Bank Bldg., Portland, Ore.	'21
Struth, H. J., Pet. Economist, Gulf Publishing Co.....	Houston, Tex.	'29
Stuart, Charles E., Stuart, James & Cooke, Inc.....	17 Battery Pl., New York, N. Y.	'28
†Stubbe, Gerhard.....	1024 Marine Bank Bldg., Houston, Tex.	'29
Stuckey, Jasper L., Prof. of Geol., North Carolina State College.....	Raleigh, N. C.	'29
†Studstrup, Albert, Braden Copper Co.....	Rancagua, Chile.	'29
Sturdevant, J. C., Supt., Superior Flake Graphite Co.....	Ashland, Ala.	'20
Sturges, Clarence B., Pres., Weiss Engrg. Corp.,		
	3734 Grand Central Terminal, New York, N. Y.	'05
Sturges, Thomas B., Pres., Pennsylvania Drilling Co.,		
	1812 West Carson St., Pittsburgh, Pa.	'17
Sturgis, Edward B., Cons. Min. Engr., Editor, The Mines Handbook,		
	17 John St., New York, N. Y.	'99
Sturtevant, T. E., Treas., Chief Engr., McKiernan-Terry Drill Co.....	Dover, N. J.	'15
†Stutenroth, Charles E., Jr., Open Hearth Dept., American Rolling Mill Co.,		
	111 Monroe St., Middletown, Ohio.	'26
Stypczynski, T. P., Pres., Mohawk Engrg. & Constr. Co., Inc.,		
	1200 N. Ashland Ave., Chicago, Ill.	'29
Styri, Haakon, Dir. of Research, S. K. F. Industries, Inc., S. K. F. Research Lab.,		
	Front St. & Erie Ave., Philadelphia, Pa.	'19
†Succop, Albert John, Min. Engr.....	218 Suncrest Ave., Pittsburgh, Pa.	'26
Suender, Eugene Herbert, Gen'l Mgr., Anthracite Collieries, Madeira, Hill & Co.,		
	Frackville, Pa.	'21
Suffern, Ernest S.....	11 Crestmont Rd., Montclair, N. J.	'23
Sugimoto, Isudz, Min. Engr. & Met., Furukawa Mining Co.....	Tokyo, Japan.	'10
†Sugiyama, Saburo, c/o Mitsui Miike Metal Refinery, Mitsui Mining Co.,		
	Omura, Fukuokaken, Japan.	'22
Suhl, R. L., Asst. Sales Mgr., Nickel Dept., International Nickel Co.,		
	67 Wall St., New York, N. Y.	'20
†Sullivan, Alan P., Research Engr., Doherty Research Co.,		
	125 Van Dam St., Long Island City, N. Y.	'22
Sullivan, Clarke, Min. Engr., Mgr., Cia. Minera Exploradora de Prountorio, S. A.,		
	Chinacates, Dgo., Mexico.	'16
Sullivan, Eugene C., V.P. in charge of Mfg., Corning Glass Works.....	Corning, N. Y.	'25
Sullivan, John J., Asst. Supt., American Smelt. & Refin. Co.....	Box 268, Alton, Ill.	'21
Sullivan, John Kevin, Cons. Min. Engr....	301 First National Bank Bldg., El Paso, Tex.	'27
†Sullivan, John W. W., Research Dept., A. O. Smith Corp.....	Milwaukee, Wis.	'22
†Sullivan, Raymond W., Asst. Engr., Pickands-Mather & Co.,		
	c/o Moccasin Inn, 419½ Howard St., Hibbing, Minn.	'28
Sully, John M., Min. Engr., Gen'l Mgr., Ray Cons. Copper Co., Chino Mines, Hurley, N. M.		'06
Sully, Kenneth M., Min. Engr.....	177 N. Sycamore Ave., Los Angeles, Cal.	'16
Suman, John R., Dir. & Executive, Production Dept., Humble Oil & Refin. Co.,		
	Room 920, Humble Bldg., Houston, Tex.	'17
Summer, Raymond H., Special Representative, E. I. du Pont de Nemours & Co., Inc.,		
	Arcade Bldg., St. Louis, Mo.	'18
Summerhayes, Maurice W., Min. Engr., Wright Hargreaves Mine,		
	Kirkland Lake, Ont., Canada.	'06
Summers, M. L., Plant Engr., Pacific States Cast Iron Pipe Co.....	Provo, Utah.	'20
Sundberg, Karl, Min. Engr., Chief Engr., A. B. Elektrisk Malmeltning, Stockholm, Sweden.		'27
Sundness, O. A., Chief Min. Engr. & Chief Chem., The Shenango Furnace Co.,		
	Chisholm, Minn.	'28
Sundt, F. A., Chief Min. Engr., Caja de Credito Minero, Casilla 100-D, Santiago, Chile.		'17
Suppes, Richard Andrews, Gen'l Mgr., Comago Smokeless Fuel Co.....	Vanwood, W. Va.	'26
Sussman, Otto, Min. Engr., The American Metal Co., Ltd., 61 Broadway, New York, N. Y.		'04
Sutherland, David Alexander, Cons. Pet. Technologist,		
	439-441, Salisbury House, London Wall, London, E. C. 2, England.	'20
Sutherland, J. W., Gen'l Mgr., Golden Horseshoe Est. Co., Ltd., Boulder, West Australia.		'92
Sutherland, R. Leslie, Fellow in Lignite Research, Univ. of North Dakota,		
	Grand Forks, N. D.	'27
Sutor, Don M., Dist. Sales Mgr., Sullivan Machinery Co.,		
	2006 Railway Exchange Bldg., St. Louis, Mo.	'17
Sutton, Chase E., Dist. Mgr., Pure Oil Co.....	2208 Esperson Bldg., Houston, Tex.	'28
Suverkrop, E. A., John A. Roebling's Sons Co.....	Trenton, N. J.	'13
†Suverkrop, Lew, Pet. Engr., Oilfields Engrg. Service,		
	317 Haberfelde Bldg., Bakersfield, Cal.	'27
Suzuki, I., Min. Engr., Mitsubishi-Ikuno Mine.....	Asako-Gun, Hyogo-Ken, Japan.	'17
Suzuki, Tomiji, Min. Engr., Kuhara Min. Co., Hitachi Mine.....	Ibaragiken, Japan.	'19



# 144 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Sveshnikoff, Alexander P., Min. Engr., St. Joseph Lead Co.....	Hughesville, Mont.	'27
Swain, Stephan F., Sales Engr., Aluminum Co. of America, 800 City Savings Bank Bldg., Albany, N. Y.		'23
**Swallow, Richard H., Min. Engr., United Electric Coal Cos..	Adams Bldg., Danville, Ill.	'30
Swanberg, F. L., Asst. to Pres., Kehota Min. Co., 706 1st National Bank Bldg., Pittsburgh, Pa.		'19
Swann, Charles E., Chief Engr., The Union Pacific Coal Co.....	Rock Springs, Wyo.	'29
Swann, Theodore, Pres., Federal Phosphorus Co., 930 Brown-Marx Bldg.,	Birmingham, Ala.	'19
Swanquist, G. A., Mgr., Butters Divisadero Mines, Mineral Divisadero...	El Salvador, C. A.	'04
Swanson, Albert N., Met., Illinois Steel Co.....	Box 22, Gary, Ind.	'29
Swanson, Arthur, Gen'l Supt., Pend Oreille Lead-Zinc Co.....	Metaline Falls, Wash.	'26
Swanson, Leonard E., Chem., Vulcan Detinning Co.....	Sewaren, N. J.	'25
Swart, Walter G., V.P. & Gen'l Mgr., Mesabi Iron Co., 711 Lonsdale Bldg., Duluth, Minn.		'99
Swarts, Clifton R.....	228 N. Quannah St., Tulsa, Okla.	'21
Swartz, A. E., Chief Mech. Engr., Braden Copper Co.....	Rancagua, Chile.	'16
Swartz, Carl E., Met., Research Dept., American Smelt. & Refin. Co.....	Maurer, N. J.	'29
Sweet, A. T., Prof. of Met., Michigan College of Mines.....	Houghton, Mich.	'28
Sweet, Alvin J., Met., National Aniline & Chemical Co.....	Abbot Rd., Buffalo, N. Y.	'28
†Sweet, Berthol G., Asst. Treas. & Purchasing Agent, Combined Metals Reduction Co., Stockton, Utah.		'18
†Sweet, Clarence T., Cons. Min. Engr., A. H. Flowerdew & Co., 14 Market St., Kuala Lumpur, F. M. S.		'24
Sweet, Henry N.....	63 Mt. Vernon St., Boston, Mass.	'91
Sweetser, Ralph H., Asst. to First V.P., The American Rolling Mill Co.,	Columbus, Ohio.	'94
Swem, Harry A., Engr., Texas Gulf Sulphur Co.....	Box 125, Gulf, Matagorda Co., Tex.	'20
Swensen, Karl P., The Radiore Co.....	350 Bay St., Toronto, Ont., Canada.	'15
Swensson, C. P.....	Box 851, Panama, Rep. de Panama.	'25
Swent, J. W., Mgr., The San Luis Min. Co., Room 910, 485 California St.,	San Francisco, Cal.	'24
Swift, E. L., Min. Engr.....	505 Fairbanks Ave., Oakland, Cal.	'14
†Swift, Frank G., Supt. & Partner, Swift Lubricator Co., 729 West 2nd St., Elmira, N. Y.		'18
Swift, George D.....	2320 E. 1st St., Duluth, Minn.	'93
Swigart, Theodore E., Chief Production Engr., Shell Oil Co., 410 Higgins Bldg., Los Angeles, Cal.		'26
Sydnor, Giles, Observer, Met. Dept., Bethlehem Steel Co.....	Sparrows Point, Md.	'27
Sykes, Lewis Bradley, Asst. Dir. of Research, Firth-Sterling Steel Co....	McKeesport, Pa.	'26
Sykes, W. P., Met. Engr., Cleveland Wire Works, General Electric Co., 1770 E. 45th St., Cleveland, Ohio.		'17
Sykes, Wilfred.....	6829 Merrill Ave., Chicago, Ill.	'15
Syme, Gilbert A., Min. Engr., Cia. Minera de Santiago y Anexas, S. A., Tlalquiltenango, Morelos, Mexico.		'20
†Syner, Clarence M., Met., Cia. Minera Asarco, Apt. 85, Veta Grande, Parral, Chih., Mexico.		'20
Syverson, A., Min. Engr.....	612 St. Paul Ave., Los Angeles, Cal.	'29
Szily, Ladislaus, Field Supt., Cia. Mexicana de Petroleo "El Aguila," S. A., Apt. 150, Tampico, Tamps., Mexico.		'27
Taber, George H., Jr.....	45 Nassau St., New York, N. Y.	'20
Taber, Stephen, Prof. of Geol. & State Geol., Univ. of South Carolina....	Columbia, S. C.	'10
Taff, Joseph A., Geol., Cons. Geol., Southern Pacific Co....	65 Market St., San Francisco, Cal.	'14
Taffanel, Jacques, Directeur General Adjoint de la Compagnie des Forges de Chatillon, Commentry et Neues-Maisons, 19, Rue de La Rochefoucauld, Paris, France.		'21
Taggart, Arthur F., Prof., Ore Dressing, School of Mines, Columbia University, New York, N. Y.		'14
Taggart, Eugene B., Salesman, The Jeffrey Manufacturing Co.....	Columbus, Ohio.	'20
Tainter, F. S., Cons. Engr., Parsons, Klapp, Brinckerhoff & Douglas, 84 Pine St., New York, N. Y.		'11
Tainton, U. C., Met., Evans-Wallower Zinc Co.....	East St. Louis, Ill.	'20
Tait, Godfrey M. S.....	3011 34th St., N. W., Washington, D. C.	'21
Takahashi, Kosaburo, Min. Engr., Mitsubishi Min. Co., Ltd., Ikuno Mine, Hyogo-ken, Japan.		'27
Takenouchi, Korehiko, Mngng. Director, Kuhara Min. Co., Ltd.....	Tokyo, Japan.	'11
**Taliaferro, D. B., Jr., Chemist, U. S. Bureau of Mines.....	Bartlesville, Okla.	'29
Taliaferro, Nicholas L., Assoc. Prof. of Geol., 8 Bacon Hall, Univ. of California, Berkeley, Cal.		'21
Tally, Robert E., Gen'l Mgr., United Verde Copper Co.....	Jerome, Ariz.	'15
Tally, Robert E., Jr.....	Jerome, Ariz.	'28
Talmage, Sterling B., Asst. Prof. of Geol., 13 University Hall, Northwestern Univ., Evanston, Ill.		'25

For explanation of symbols, see page 5.

Tama, Manuel, V.P., Hirsch Kupfer & Messingwerke, A. G.	Berlin, Germany.	'28
†Tamor, David, Met., Reading Steel Casting Co.	Hartford, Conn.	'20
Tams, W. P., Jr., Pres., Gulf Smokeless Coal Co.	Tams, W. Va.	'23
†Tanaka, Juichi	15, Hirowo-Machi, Azabu, Tokyo, Japan.	'20
Tanberg, Arthur P., Dir., Experimental Station, E. I. du Pont de Nemours & Co.,	Henry Clay, Del.	'22
Tanner, Wallace B., Met. Engr., Pres., California Termite Control Co., Inc.,	325 Citizens National Bank Bldg., Los Angeles, Cal.	'26
Tarkington, George W., Min. Engr.	1065 Bannock St., Denver, Colo.	'18
Tarnawiecki, M. C., Min. & Civ. Engr.	Box 201, Trujillo, Peru.	'20
Tarr, Allan Lawrence, Asst., Dept. of Min. & Met., Mass. Inst. of Tech.,	Room 8-219, Cambridge, Mass.	'28
Tartaron, Francis X.	324 W. 101st St., New York, N. Y.	'27
Tarwater, Polk, Banking, First National Bank	Rockwood, Tenn.	'00
†Tassler, A. H.	Box 72, Warren Point, N. J.	'23
†Tateyama, S. K., Met. Lab., Central Alloy Steel Corp.	Box 155, Massillon, Ohio.	'24
Tatman, John Lowell	Box 1161, Struthers, Ohio.	'24
Tatsuno, Masayuki, Met. Engr., Supt., Shisakajima Copper Works, Sumitomo & Co.,	Ochigun, Iyo, Japan.	'19
Taubert, Charles, Univ. of California	Los Angeles, Cal.	'23
†Taussig, Gustave C., Asst. Mgr., St. Louis Smelt. & Ref. Co.,	722 Chestnut St., St. Louis, Mo.	'17
Taylorson, Ewart S., Engr. of Tests, American Sheet & Tin Plate Co.,	320 Frick Bldg., Pittsburgh, Pa.	'25
†Taylor, Albert G., Chem., Research Dept., Evans-Wallower Zinc Co.,	Monsanto, E. St. Louis, Ill.	'27
Taylor, Albert W.	801 Sutter St., San Francisco, Cal.	'00
Taylor, Arnold Flint, Research Asst. in Physics,	Room 2-075, Mass. Inst. of Tech., Cambridge, Mass.	'26
Taylor, Floyd T., V.P., A. P. Munning & Co.	Matawan, N. J.	'27
Taylor, Frank M.	730 Symes Bldg., Denver, Colo.	'01
Taylor, George Edmond, Cons. Engr., Partner, Anderson & Taylor,	609-611 Bank of Commerce Bldg., Charleston, W. Va.	'23
Taylor, Harry N., Pres., United States Distributing Corp.,	17 Battery Pl., New York, N. Y.	'28
Taylor, Henry B., U. S. Customs Assay Office.	401 Federal Bldg., Kansas City, Mo.	'08
Taylor, Henry B., Geol., Prairie Oil & Gas Co.	453 Roosevelt Bldg., Los Angeles, Cal.	'27
Taylor, Henry Ross, Mill Supt., Granby Cons. Min. Smelt. & Power Co., Ltd.,	Allenby, B. C., Canada.	'21
Taylor, John C.	7801 Euclid Ave., Cleveland, Ohio.	'14
Taylor, Joseph H.	Columbiana, Ala.	'18
Taylor, Jos. J., Min. Engr., San Francisco Chem. Co.	Montpelier, Idaho.	'90
Taylor, Leslie S., The Dorr Co.	247 Park Ave., New York, N. Y.	'26
Taylor, Lewis H., Jr.	25 Elliott Ave., Bryn Mawr, Pa.	'99
Taylor, Mark D., Jr., Owyhee Chem. Products Co.	Cheyenne, Wyo.	'25
†Taylor, Martin S., Met., Treadwell-Yukon Min. Co.	Bradley, Ont., Canada.	'25
Taylor, R. F., Cons. Engr.	Toronto, Ont., Canada.	'21
Taylor, Roger, Office Asst., Secretary of War.	Washington, D. C.	'17
Taylor, Samuel A., Cons. Engr. & Mgr. of Mines, Various Cos.,	711 1st National Bank Bldg., Pittsburgh, Pa.	'05
Taylor, Thomas, Gen'l Supt. of Smelter, United Verde Copper Co.	Clarkdale, Ariz.	'17
Taylor, W. L., Chief Engr., Meriden Iron Co.	Hibbing, Minn.	'20
Taylor, W. W., Supt., Dwight P. Robinson & Co., Inc.,	c/o Youngstown Sheet & Tube Co., Campbell Wks., Youngstown, Ohio.	'15
Taylor, Warner G., Supt., Blast Furnace.	Stanhope, N. J.	'14
Taylor, William W., Min. & Chem. Engr.	Signal Mountain, Tenn.	'97
Teagle, Walter C., Pres., Standard Oil Co. of New Jersey	26 Broadway, New York, N. Y.	'20
Teal, George W., Min. Engr., City Mgr. of Boulder	Box 463, Boulder, Colo.	'14
Teas, L. P.	Room 901, Humble Bldg., Houston, Tex.	'18
†Teats, Roscoe, Supt., Globe Plant, American Smelt. & Refin. Co.,	704 Equitable Bldg., Denver, Colo.	'17
†Tedford, Donald S.	462 S. Valley St., Neosho, Mo.	'22
Tedrow, H. L.	2202 E. 14th Ave., Denver, Colo.	'19
Teel, Claude Cameron, Mill Supt., Siscoe Gold Mines, Ltd.	Amos, Que., Canada.	'28
Teets, D. D., Jr., Asst. Office Engr., The State Road Commission of West Virginia,	Temporary Capitol Bldg., Charleston, W. Va.	'19
†Tejeda, Manuel L., Lane-Rincon Mines, Inc.	Real de Arriba, via Toluca, Mex., Mexico.	'24
Teks, David H.	Box 622, Ray, Ariz.	'29
Telfer, Leonard, Min. Engr., Cons. Min. & Smelt. Co.	Trail, B. C., Canada.	'29
Tempest, R. B., Asst. Gen'l Mgr., Nevada Cons. Copper Co.	Hurley, N. M.	'20
Temple, C. E., Chief of Party, Seaboard Engrg. & Contracting Co.,	410 Douglas Bldg., Los Angeles, Cal.	'27

Templeman, J. L.	727 West Park St., Butte, Mont.	'16
Templeton, A. R., Chem., Anaconda Copper Min. Co.	Anaconda, Mont.	'25
Templeton, Eugene C., Chief Geol., Union National Pet. Co.	Apt. 484, Caracas, Venezuela.	'18
Templeton, J. M., Transvaal Chamber of Mines	Johannesburg, Transvaal, S. Africa.	'26
Templeton, John C., Gen'l Fields Mgr., Turkish Pet. Co., Ltd.	Bagdad, Irak.	'28
Templeton, R. R., Pet. Engr., De Bataafsche Pet. Maatschappij, Carel van Bylandtlaan 30, The Hague, Netherlands.		'27
Tennberg, C. Ingemar, Min. Engr., The Electrical Prospecting Co.	Stockholm 16, Sweden.	'26
Terpstra, Douglass, Gen'l Mgr., Premier Red Ash Coal Corp.	Red Ash, Va.	'19
Terrell, Arthur D., Asst. to Pres., National Zinc Co.	Bartlesville, Okla.	'16
Terrill, Arthur C., Prof. of Geol. San Bernardino Valley Union Junior College, San Bernardino, Cal.		'15
Terry, Lyon F., Engr., Pet. & Natural Gas, Ralph E. Davis, Engr., 111 Broadway, New York, N. Y.		'23
Terry, Mark Loren	1716 E. 14th Pl., Tulsa, Okla.	'27
Tesch, T. An., Min., Met. & Mech. Engr., Firm of T. An. Tesch, Hamngatan 5A, Stockholm, Sweden.		'14
Thacher, Arthur, Min. Engr.	900 Security Bldg., St. Louis, Mo.	'75
Thackray, George E., Special Engr. Bethlehem Steel Co.	Bethlehem, Pa.	'80
**Thackwell, Fred E., Fellowship, Metallurgical Research, U. S. Bureau of Mines, Univ. of Utah, Salt Lake City, Utah.		'30
Tharp, Webster J., Geophysicist, Empire Cos. Cities Service, 414 Stewart Bldg., Houston, Tex.		'21
Thatcher, Charles J., Chem. Engr. & Electrochemist, Expert in Patent Causes, 114 E. 32nd St., New York, N. Y.		'26
**Thatcher, Thomas Hudson, Jr.	Chambers Rd., Ferguson, Mo.	'29
Thayer, Benjamin B., V.P., Anaconda Copper Min. Co.	25 Broadway, New York, N. Y.	'87
Thayer, Harry S., Min. Engr.	2127 N. Cascade Ave., Colorado Springs, Colo.	'10
Thede, G. E., Min. Engr.	1527 E. Maple St., Glendale, Cal.	'30
Thelin, Leon William	168 Farmington Ave., Waterbury, Conn.	'25
Thiel, Joseph M., Geol., Missouri Bureau of Geol. & Mines, Chamber of Commerce, Joplin, Mo.		'25
Thielicke, Charles G., Cia. de Inversiones del Oro, S. A.	Apt. 11, Sombrerete, Zac., Mexico.	'27
Thoenen, J. R., Asst. Chief, Building Materials Section, Bureau of Mines.	Washington, D. C.	'15
Thom, W. T., Jr., Assoc. Prof., Geol.	Dept. of Geol., Princeton Univ., Princeton, N. J.	'20
Thomas, Chester R.	3816 E. Lewis, Wichita, Kans.	'21
Thomas, Darius A., Pres. & Treas., Montevallo Coal Min. Co., 1802 American-Traders Bank Bldg., Birmingham, Ala.		'24
Thomas, David R., Min. Engr.	2001 Bloor St. W., Toronto, Ont., Canada.	'04
Thomas, Edward, Patent Lawyer & Chem., Woolworth Bldg., Room 3010, 233 Broadway, New York, N. Y.		'27
Thomas, Edward G.	228 South Oxford Ave., Los Angeles, Cal.	'02
Thomas, Edward M., Min. Engr., Washburn Lignite Co.	Wilton, N. D.	'26
Thomas, Eugene M., Field Engr., City of El Paso	City Engineer's Office, El Paso, Tex.	'26
Thomas, Frederick L., Min. Engr., Gen'l Mgr., The National Min. Corp. Ltd. of London, (Lake George Mine) Captain's Flat, N. S. W., Australia.		'21
Thomas, George G., Gen'l Mgr., Bagdad Copper Corp.	Hillside, Ariz.	'28
Thomas, Harold Scott, Paleontologist, Tidal Oil Co.	Tulsa, Okla.	'26
Thomas, Howard J., Gen'l Supt. Mines, Sloss-Sheffield Steel & Iron Co., 906 American Trust Bldg., Birmingham, Ala.		'21
Thomas, Hubert Spence, Tinsplate Mfr., Melingriffith Co. Ltd., Whitchurch, Nr. Cardiff, Wales.		'06
Thomas, J. Elmer, Oil Producer, Thomas Pet. Corp., 602 Fort Worth Club Bldg., Fort Worth, Tex.		'18
Thomas, John A., Supt., The Atlas Gypsum Corp.	Clarence Center, N. Y.	'22
Thomas, John Ira, Deputy Sec. of Mines, Commonwealth of Pennsylvania, 411 Johnstown Trust Bldg., Johnstown, Pa.		'20
Thomas, Kirby, Cons. Engr.	25 Broadway, New York, N. Y.	'04
Thomas, Leon E., Pres., Reading Iron Co. & Thomas Iron Co.	Reading, Pa.	'24
Thomas, Leonard G., Supt., Combined Metals Reduction Co.	Pioche, Nev.	'29
Thomas, Marion L., Min. Engr., Prop. Roserock Quarries	Crown Point, N. Y.	'05
Thomas, Olin P., Cons. Engr.	Union National Bank Bldg., Johnstown, Pa.	'21
Thomas, P. C., Mgr. of Mines, Koppers Coal Co.	1050 Koppers Bldg., Pittsburgh, Pa.	'29
Thomas, Richard, Jr., Colliery Mgr., Rothbury Collieries	Branxton, N. S. W., Australia.	'23
Thomas, Richard W., Supt., Steel Foundry, Vulcan Iron Works	Wilkes-Barre, Pa.	'24
Thomas, Robert M., Thomas Mfg. Co.	New Castle, Ind.	'21
Thomas, Roy E., Asst. Chief Engr., Giesche Spolka Akcyjna	Katowice, Poland.	'21
Thomas, T. Lewis	620 Stock Exchange Bldg., Philadelphia, Pa.	'99
Thomas, Thomas D., Mine Inspector, Lehigh Coal & Navigation Co., Lansford, Carbon Co., Pa.		'25



Thomas, W. A., Asst. Chief, Oxide West Dept., New Jersey Zinc Co., (of Pa.),	
Thomas, William S., Supt., J. G. Edwards Co.....	220 Postal Bldg., Portland, Ore. '96
Thompson, A. P., Cons. Min. Geol., Owner & Operator of Mines,	
Thompson, Arthur Beeby, Cons. Engr., A. Beeby Thompson & Partners,	
Thompson, Benedict E., Asst. to Chief Geol., Gulf Production Co., Box 737, Fort Worth, Tex.	21 Lake Ave., Piedmont Station, Oakland, Cal. '13
Thompson, Charles L., Geol., Research Oil Co.....	18 St. Swithin's Lane, London, E. C. 4, England. '19
Thompson, David P., Inland Steel Co.....	Box 997, Eastland, Tex. '17
Thompson, Hugh L., Cons. Engr.....	1st National Bank Bldg., Chicago, Ill. '16
Thompson, John F., Asst. to the Pres., International Nickel Co. of Canada, Ltd.,	Box 1033, Waterbury, Conn. '18
Thompson, John I., Chief Engr., The Koppers Co. ....	67 Wall St., New York, N. Y. '16
Thompson, Lester S., Geol. & Production Engr., Carter Oil Co....	Union Arcade Bldg., Pittsburgh, Pa. '18
Thompson, M. V., Moctezuma Copper Co.....	Box H, Seminole, Okla. '15
Thompson, Robert M.....	Pilares de Nacozari, Son., Mexico. '29
Thompson, S. M., Pres. The Caliente Coal Co.....	16 East 43rd St., New York, N. Y. '81
Thompson, S. A., Chief Geol., Crude Oil Dept., Vacuum Oil Co.,	Ravenwood, Colo. '24
Thompson, Thomas West, Mine Supt., Great National Mexican Smelt. Co.,	
THOMPSON, WILLIAM BOYCE.....	613 Esperson Bldg., Houston, Tex. '23
Thomson, Alexander T., Sec. & Treas., Phelps Dodge Corp.....	Est. San Juan, Coah., Mexico. '28
Thomson, Francis A., Pres., Montana State School of Mines.....	1061 North Broadway, Yonkers, N. Y. '14
Thomson, Glad. A., Tech. Asst., Carbon Plant Office, Aluminum Co. of Canada,	99 John St., New York, N. Y. '13
Thomson, H. A.....	Box 117, Arvida, Que., Canada. '24
Thomson, H. Britton, Pet. Engr., Indian Territory Illuminating Oil Co.,	Box 117, Indianapolis, Ind. '20
Thomson, Henry N., Cons. Met., Prof. of Met., Univ. of British Columbia,	Box 577, Seminole, Okla. '21
Thomson, Joseph L., Supt., Southern Copper Min. Co.....	Vancouver, B. C. Canada. '07
Thomson, Samuel C., Cons. Min. Engr.....	Box 1266, Nogales, Ariz. '27
Thorkildsen, Birger, Min. Engr.....	120 Broadway, New York, N. Y. '98
Thorn, J. F., Gen'l Mgr., Lake View and Star Ltd.....	Evje, pr. Kristiansand, So. Norway. '21
Thornburgh, Hubert Robert, Geophysicist, Shell Pet. Corp., Athletic Club Bldg., Dallas, Tex.	Kalgoorlie, Australia. '06
Thorne, B. Leonard, Min. Engr., Coal Mines Branch, Department of Natural Resources	
Thorne, S. Brinckerhoff, Pres., Thorne Neale & Co.....	Canadian Pacific Ry., Calgary, Alta., Canada. '07
Thorne, William E.....	17 Battery Pl., New York, N. Y. '20
Thornton, Edward, Min. Engr., V.P., Southwestern Engrg. Corp.,	251 Ashbury St., San Francisco, Cal. '01
Thornton, W. D.....	1221 Hollingsworth Bldg., Los Angeles, Cal. '27
Thorsen, George W., Min. Engr.....	Cunard Bldg., 25 Broadway, New York, N. Y. '96
Throckmorton, Howard, Howard Throckmorton & Co., Room 1110-1111, Great Republic	
Thropp, Douglas S., Mgr., Waterside Concrete Works,	Vulcan, Mich. '27
Thropp, J. Earlston, Jr.....	Life Bldg., Cor. 8th & So. Spring Sts., Los Angeles, Cal. '03
Thum, E. E., Assoc. Editor, <i>The Iron Age</i> .....	Commerce & Waterbury Ave., New York, N. Y. '20
Thurman, James W., Student, Carnegie Inst. of Tech.....	400 Elm St., Chevy Chase, Md. '96
Thurston, Ralph V.....	239 W. 39th St., New York, N. Y. '18
Tiberg, Sten, Asst. Supt., Telefonaktiebolaget L. M. Ericsson,	Pittsburgh, Pa. '28
Tickell, Frederick G., Prof. of Pet. Engrg., Stanford Univ.....	Payette, Idaho. '20
Tiemann, Hugh P., Asst. Met. Engr., Carnegie Steel Co....	Dobelnsgatan 18, Stockholm, Sweden. '25
Tillson, Benjamin F., Min. Engr., Asst. Supt., New Jersey Zinc Co.....	Stanford University, Cal. '23
Tilly, Alfred, Min. Engr.....	563 Frick Annex, Pittsburgh, Pa. '13
Timm, John M., Min. Engr.....	Franklin, N. J. '05
Timm, William August, Mfg. Methods Engr., Western Electric Co.,	Tregony, Grampound Road, Cornwall, England. '99
Timmis, Frank Woollaston, Civ. & Min. Engr., Rio Tinto Co. Ltd.,	Jungstrasse 38, Basle, Switzerland. '96
Tinker, Willis L., Sec., The Lake Superior Iron Ore Association,	
Tinsley, Robert B.....	Hawthorne Sta., Chicago, Ill. '26
Tippett, James W., Seacroft, Periesville Rd., Babbacombe, Torquay, Devon, England.	
Tippett, John M., Supt., Independence Mill, Portland Gold Min. Co.....	1421 Union Trust Bldg., Cleveland, Ohio. '23
Titcomb, Harold Abbot, Min. Engr., Selection Trust Bldg.,	4 Palm Terrace, New Orleans, La. '12
	Mason's Ave., Coleman St., London, E. C. 2, England. '99

# 148 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Tittmann, Edward McL., Student, Mass. Inst. of Tech.....	Cambridge, Mass.	'29
Titzell, George G., Jr., Asst. Mgr. of Sales Carnegie Steel Co.	1501 Liberty Central Trust Bldg., St. Louis, Mo.	'16
†Tizard, William Essen.....	2424 Via Anita, Palos Verdes Estates, Cal.	'26
Tobelmann, Henry A., Asst. Treas. & Agent, Ohio Copper Co. of Utah.	506 Clift Bldg., Salt Lake City, Utah.	'15
Todd, Emerson H., Sales Engr., Hazard Mfg. Co.....	Wilkes-Barre, Pa.	'25
Todd, W. Parsons, V.P., Quincy Min. Co.....	52 Broadway, New York, N. Y.	'16
Teenges, Albert L., Western Coal & Min. Co.....	1400 Missouri Pacific Bldg., St. Louis, Mo.	'15
Toenniges, F. E., Chief Engr., The United Electric Coal Cos.....	Adams Bldg., Danville, Ill.	'30
Tokunaga, Shigeasu, Prof., Waseda Univ.....	Tokyo, Japan.	'21
Tolmachoff, I. P., Prof., Univ. of Pittsburgh.....	Pittsburgh, Pa.	'27
Tolman, John Dudley, Gen'l Supt., Porcupine United Gold Mines, Ltd.	Timmins, Ont., Canada.	'29
†Tolonen, A. W., Min. Engr., Hudson Bay Min. & Smelt. Co.,	Flin Flon Mine, Via The Pas, Man., Canada.	'20
Tolonen, Frank J., Research Engr., Met. Dept., Michigan College of Mines,	Houghton, Mich.	'26
Tomita, Haruyoshi, Mitsubishi Min. Co.....	Marunouchi, Tokyo, Japan.	'17
Tomlinson, C. W., Geol., Schermerhorn-Ardmore Co.....	610 Simpson Bldg., Ardmore, Okla.	'20
Tomlinson, F. C., Min. Engr., Supt., Wiltsey-Coghlan Mines Ltd. & Sudbury Contact Mines.	Ltd., Box 1680, Sudbury, Ont., Canada.	'28
†Tompkins, Edwin S., Min. & Met. Engr. ....	90 West St., New York, N. Y.	'19
Tompkins, Joseph D., Gulf Production Co.....	Eastland, Tex.	'28
Tone, Frank J., Pres., The Carborundum Co.....	Niagara Falls, N. Y.	'18
Tong, Sing Kow, Quaker Institute.....	No. 2 Kwong Tai Lu, Canton China.	'90
Tong, Tsze Su, Supt. & Chief Engr., Yutsai Steel Works.....	Taiyuanfu, Shansi, China.	'19
Tonne, Lyle Philip, Min. Engr., Pickands, Mather & Co.....	Box 1597, Hibbing, Minn.	'28
Tonnele, Theodore, Met. Engr.....	39 Cedar Ave., Montclair, N. J.	'84
Topping, John A., Chairman, Republic Iron & Steel Co.....	17 Battery Pl., New York, N. Y.	'14
Torbert, James B., Min. Engr., Pres., Harlan-Wallins Coal Corp.....	Pineville, Ky.	'09
Torell, Torgny, Pusey & Jones Co.....	Wilmington, Del.	'13
Torgerson, Alfred C., Gen'l Mgr., Associated Gas & Oil Co.....	Butte, Mont.	'20
†Torgler, Edward R., Met., S. R. Dresser Mfg. Co.....	Bradford, Pa.	'28
†Torrence, Edward James, Asst. Met., Milling Dept., Braden Copper Co.,	Sewell, Rancagua, Chile.	'22
Torres, F. L., V.P., Eureka Smelt. Co.....	730 Fifth Ave., New York, N. Y.	'10
Torrey, Paul Dwight, Geol., Northwestern Pennsylvania Oil Producers Assn.,	Bradford, Pa.	'25
Touceda, Enrique, Chem. and Met., Pres., Engrg. Service Corp.,	943 Broadway, Albany, N. Y.	'89
Toulmin, Priestley.....	430 Brown-Marx Bldg. Birmingham, Ala.	'88
Tour, Sam, V.P., Chem. & Met. Engr., Lucius Pitkin Inc.....	47 Fulton St., New York, N. Y.	'23
Tout, Edwin Irving, Min. Engr., Gen'l Supt., O. M. Bilharz Min. Co.....	Miami, Okla.	'21
†Touwaide, Marcel E., Pet. Engr., Geol., Bataafsche Pet. Maatschappij,	Tarakan, Borneo, D. E. I.	'27
Touwaide, Raoul Henry, Cons. Engr.....	75 Muhurdar Caddesi, Kadikoy, Constantinople.	'28
Tower, George Warren, Jr., Min. Engr. & Geol., Guggenheim Bros.,	120 Broadway, New York, N. Y.	'01
Tower, George W., 3rd, Min. Engr., Mineral Research Corp.....	120 Broadway, New York, N. Y.	'23
Tower, Joseph T. Min. Engr.....	Millbrook, N. Y.	'24
Towl, Forrest M., Pres., Southern Pipe Lines Co.....	Room 2611, 26 Broadway, New York, N. Y.	'14
Townsend, H. P., Min. Engr., City Deep, Ltd., Box 1411, Johannesburg, Transvaal, S. Africa.		'01
Townsend, Harry, Cons. Min. Geol.....	605 Pioneer Bldg., Seattle, Wash.	'20
Townsend, R. H., Calaveras Cement Co.....	San Andreas, Cal.	'15
Townsend, Rex, Cons. Engr., Geol., Mexican Seaboard Oil Co.	120 Broadway, New York, N. Y.	'20
Toy, Francis L., Met., Supt., Open Hearth Dept., Homestead Works, Carnegie Steel Co.,	Munhall, Pa.	'12
Trager, Earl A., Skelly Oil Co.....	Box 2087, Tulsa, Okla.	'19
†Trainer, David W., Jr., Teacher, McGraw Hall, Cornell Univ.....	Ithaca, N. Y.	'24
Tratman, E. E. R., Norman Medal, A.S.C.E.; Civ. Engr., Western Editor, <i>Engrg.</i>	<i>News-Record</i> , 217 Gary Ave., Wheaton, Ill.	'91
Trauerman, Carl J., Min. Engr., Pres., Montana Stock & Bond Co.,	25 E. Broadway, Butte, Mont.	'12
Travers, Joseph Hill, Resident Mgr., Siscoe Gold Mines, Ltd.....	Amos, Que., Canada.	'26
**Travers, William J., Jr., Asst. Prod. Engr., Richfield Oil Co. of California,	506 Richfield Bldg., 555 S. Flower St., Los Angeles, Cal.	'30
†Travis, Raymond G.....	4642 Lake Park Ave., Chicago, Ill.	'27
Trax, David L., Pet. Prod. Engr., Gypsy Oil Co.....	Box 2044, Tulsa, Okla.	'29
Traylor, Samuel W., Mfr., Traylor Engrg. & Mfg. Co.....	Allentown, Pa.	'03
Treat, F. H.....	10912 Carnegie Ave., Cleveland, Ohio.	'86

For explanation of symbols, see page 5.

Trebilcock, Raymond A., International Harvester Co.	Box 1986, Hibbing, Minn.	'26
Tree, Russell M., Tech. Supervisor, Kenosha Branch, The American Brass Co.,	Kenosha, Wis.	'27
Trefois, George H., Sec. Gen'l, Cia. Siderurgica Belgo-Mineria, Rua 1° de Marco no 101,	Rio de Janeiro, Brazil.	'21
Tregoning, R. A., Min. Engr.	c/o W. J. Tregoning, Newport Co., Pensacola, Fla.	'20
Treichler, H. E., Acting Gen'l Mgr., Texas Gulf Sulphur Co.	Newgulf, Wharton Co., Tex.	'17
Tremoureux, Roy E., Cons. Engr., U. S. Lime Products Corp.,	58 Sutter St., San Francisco, Cal.	'13
Trench, Robert Hamilton, Dir., British Burmah Pet. Co.,	6 Queen St. Pl., London, England.	'17
Trengove, S. R., Min. Engr., Mgr., Ice Plant.	Prescott, Ariz.	'00
Trent, Walter E., Cons. Engr., V.P., Trent Process Corp.,	Room 1200, 52 Broadway, New York, N. Y.	'15
Trevino, Jose Oscar, Min. Engr.	Box 235, Chihuahua, Chih., Mexico.	'23
Trewin, C. S., Mech. Engr., The New Jersey Zinc Co.,	160 Front St., New York, N. Y.	'18
Treize, Frederick William, Prof., Dept. of Engrg., Lawrence College.	Appleton, Wis.	'27
†Trimble, Raleigh P.	434 N. Beachwood Dr., Los Angeles, Cal.	'19
Trotzig, Peter, Cons. Min. & Met. Engr.	Tibagy (Estado do Parana) Brazil.	'29
Trumbull, R. Carr, Supt., Crushing & Chloridizing Dept., Pyrites Co., Ltd.,	Wilmington, Del.	'20
Truschkoff, Nicolas, Prof. of Min., Mining Institute.	Leningrad, U.S.S.R.	'09
Truscott, Samuel John, Prof. of Min., Royal School of Mines.	London, S. W. 7, England.	'15
Trushlevich, Victor J., Asst. Prof. of Ore Dressing, Academy of Mines,	Moscow 54, U.S.S.R.	'27
Tryon, F. G., Geol., Charge, Coal & Coke Statistics, Bureau of Mines.	Washington, D. C.	'20
†Tsuji, Naoichi, Lecturer, Min. & Met. Dept., Osaka High Technical College,	Higashinoda, Kitaku, Osaka, Japan.	'19
Tsujimoto, Kennosuke, Cons. Engr., Fujita-Gumi,	2021 Tokiwadori, Tennojimachi, Sumiyoshi-ku, Osaka City, Japan.	'10
Tsukamoto, Toshiro, Met. Engr., c/o Mitsui Miike Metal Refinery, Mitsui Mining Co.,	Ohmuta, Fukuokaken, Japan.	'22
†Tuck, Ralph, Instructor, Geol. Dept., Cornell Univ.	Ithaca, N. Y.	'29
Tudor, J. W., Min. Engr.	35 Congress St., Boston, Mass.	'98
Tufft, Harry E.	1626 Santa Barbara St., Santa Barbara, Cal.	'28
†Tuller, Clarence H.	301 E. 7th Ave., Denver, Colo.	'25
†Tung, Teng-Shan, Mgr., Material Dept., Government Arsenal.	Taiyuenfu, Shansi, China.	'20
†Tunnell, G. T., New Jersey Zinc Co.	160 Front St., New York, N. Y.	'20
†Tupper, Otis Mitchell, Jr., Supt., Clay Corp. of California.	Box 341, Lincoln, Cal.	'28
†Turley, Lovell L., Local Supt., Mine La Motte Corp.	Fredericktown, Mo.	'20
†Turnbull, A. D., Foreman, Lead Refinery, Consolidated Min. & Smelt. Co.,	Trail, B. C., Canada.	'24
†Turnbull, Louis A., Min. Engr., Western Coal & Min. Co.,	1400 Missouri Pacific Bldg., St. Louis, Mo.	'22
†Turnbull, Paul R., Student, Univ. of Oklahoma, School of Mines.	Norman, Okla.	'29
†Turneure, F. S., Geol., Patino Mines & Enterprises Cons. Inc.	Llallagua, Bolivia.	'20
Turner, Charles P., Retired.	1042 Rolleston St., Harrisburg, Pa.	'12
Turner, Edgar Grubb, Div. Engr., Colorado Fuel & Iron Co.	Walsen, Colo.	'27
Turner, Henry W., Min. Geol.	593 Mills Bldg., San Francisco, Cal.	'00
Turner, J. K., Cons. Engr.	1227-28 Rowan Bldg., 458 So. Spring St., Los Angeles, Cal.	'00
Turner, R. Chester.	2517 Benvenue Ave., Berkeley, Cal.	'95
Turner, Scott, Cons. Engr., Director, U. S. Bureau of Mines.	Washington, D. C.	'06
Turner, William J., Engr., Asst. Gen'l Mgr., Braden Copper Co.	Rancagua, Chile.	'13
Tuttle, Arthur L., Min. & Met. Engr.	Danville, Ky.	'93
Tuttle, C. E.	48 Wall St., New York, N. Y.	'26
Tuttle, Jay, Mgr., Amulet Mines, Ltd.	Rouyn, Que., Canada.	'21
Tutwiler, Temple W.	483 Brown Marx Bldg., Birmingham, Ala.	'21
Tweed, George P., Pres. & Mgr., Ceates & Tweed.	307-312 Lonsdale Bldg., Duluth, Minn.	'24
Tweedie, John J., Eagle Iron Wks.	Chuquito, Callao, Peru.	'22
Tweedt, Andre Marcel, Student, College of Mines, Univ. of California.	Berkeley, Cal.	'28
Tweedy, A. M., Min. Engr., Gen'l Mgr., South American Dev. Co.,	225 Broadway, New York, N. Y.	'14
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Tyler, Paul M., Min. Engr.	1817 37th St. N. W., Washington, D. C.	'16
Tyler, W. D., V.P., Clinchfield Coal Corp.	Dante, Russell Co., Va.	'24
Tyrrrell, J. B., Min. Engr., Kirkland Lake Gold Min. Co.,	810 Lumsden Bldg., Toronto, Ont., Canada.	'99



# 150 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

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†Tyson, George E., Supt., Pennsylvania Hardware Co., Reading, Pa.	'18
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Udy, Marvin J., Research, Electrometallurgical Co., Niagara Falls, N. Y.	'18
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Uhlen, Frederick W., Chief Engr., John A. Savage & Co., Crosby, Minn.	'21
†Uhlig, William F., Asst. Supt., Brooklyn Union Gas Co., Kent Ave. & North 12th St., Brooklyn, N. Y.	'20
Uitti, George I., Structural Engr., 5502 N. Natchez Ave., Box Nagel & N. W. Hwy., Chicago, Ill.	'25
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Umpleby, Joseph B., Pres., Goldelline Oil Corp. & Petroleum Reclamation Co., Braniff Bldg., Oklahoma City, Okla.	'15
Underhill, James, Min. Engr., Assoc. Prof. of Min., Colorado School of Mines, Idaho Springs, Colo.	'98
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Underwood, J. R., Mine Owner and Operator, Granby, Mo.	'16
Unger, J. S., Mgr., Central Research Bureau, Carnegie Steel Co., Pittsburgh, Pa.	'91
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Upthegrove, Clair, Asst. Prof. of Met. Engrg., East Engrg. Bldg., Univ. of Michigan, Ann Arbor, Mich.	'20
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Urban, Stephen Florenz, Lab. Research Asst., Univ. of Michigan, 2031 E. Eng. Bldg., Ann Arbor, Mich.	'28
Uren, Lester C., Prof. of Pet. Engrg., Min. Bldg., Univ. of California, Berkeley, Cal.	'17
Urfer, Kenneth G., Asst. Engr., Union Pacific R. R. Co., Portland, Ore.	'24
Ustynik, Edwin F., Geol. Engr., Mackay, Tex.	'28
Uttley, H. H., Min. & Met. Engr., St. Louis Smelt. & Refin. Co., Florence, Colo.	'02
Utter, George H., Min. Engr., 1834 E. 2nd St., Long Beach, Cal.	'16
Uyeno, Kageaki, 43 Honmuracho, Azabu, Tokyo, Japan.	'14
Vail, Herbert E., Gen'l Mgr., Lake View & Star, Ltd., Box 99, Fimiston, West Australia.	'05
Vail, Richard H., 34 East 61st St., New York, N. Y.	'05
Valerius, M. M., Geol., The M. M. Valerius Co., Wilcox Bldg., Tulsa, Okla.	'14
Vallat, Benjamin W., Min. Engr., 215 Dudley Bldg., Santa Monica, Cal.	'05
Van Alstine, Charles L., Mine Boss, Braden Copper Co., Rancagua, Chile.	'24
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van Aubel, H. E., Pet. Engr., The Caribbean Pet. Co., Maracaibo, Venezuela.	'25
van Barneveld, Charles E., Min. Engr., Chatsworth, Cal.	'01
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Van Bree, Firmin, Cons. Engr., 3, Montagne du Parc, Brussels, Belgium.	'20
van Buren, Francis R., The Sugar Institute, Inc., 129 Front St., New York, N. Y.	'25
Van Burgh, Lisle R., Geol., Bureau of Internal Revenue, 728 South Hill St., Los Angeles, Cal.	'19
Van Buskirk, R. B., Andes Copper Min. Co., Potrerillos, Chile.	'20
Vance, Harold J., Marland Production Co., McCamey, Tex.	'23
Vanden Broek, J., Min. Engr., 57 Teplaan, The Hague, Netherlands.	'24
Vanderburg, William O., Assoc. Min. Engr., Rare & Precious Metals Experiment Station, U. S. Bureau of Mines, Reno, Nev.	'29
van der Gracht, W. A. J. M. van Waterschoot, c/o Baron Hammer-Purgstall, Schloss Hainfeld, Feldbach, Steiermark, Austria.	'16
†van der Hoff, William A., Min. Engr., Netherlands-India Tin Exploitation Co., Karimoen, D. E. I.	'25
van der Linden, B. H., Min. Engr., Royal Dutch Oil Co., 30 Carel van Bylandlaan, The Hague, Netherlands.	'15
Vander Maelen, Charles, Chief of Laboratories, Union Miniere du Haut Katanga, Box 480, Elisabethville, Belgian Congo, W. Africa.	'21
van Diest, Edmond C., Cons. Engr., 412 Mining Exchange Bldg., Colorado Springs, Colo.	'89
†van Dissel, E. D. Cartier, Min. Engr. & Gen'l Mgr., Compania de Minas de Colquiri, Casilla 360, Oruro, Bolivia.	'25

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van Dorp, J. Fredericus, Mngng. Dir., Cia. Minera de Oruro, Casilla 154, Oruro, Bolivia.	'26
Van Ells, H. T., Statistician, Anaconda Copper Min. Co.....	25 Broadway, New York, N. Y. '13
Van Ess, T. W., Asst. Gen'l Mgr., Oriental Cons. Min. Co.....	Unsankinko, Chosen (Korea). '13
†Van Evera, DeWitt.....	324 Beason Bldg., Salt Lake City, Utah. '20
Van Evera, James Wilbur, Mgr., Gordon Min. Co.....	Crosby, Minn. '21
Van Gogh, F. A. A., Min. Engr. & Pet. Geol., Bataafsche Petroleum Maatschappij, 30 Carel van Bylandtlaan, The Hague, Netherlands.	'19
Van Gundy, Jay E., Continental Oil Co., 1035 Subway Terminal Bldg., Los Angeles, Cal.	'19
van Holst Pellekaan, W., Chief Geol., Shell Pet. Corp.....	Shell Bldg., St. Louis, Mo. '21
Van Horn, E. A.....	216 Maclay St., Harrisburg, Pa. '15
Van Horn, Frank R., Prof. of Geology and Mineralogy, Case School of Applied Science, Cleveland, Ohio.	'11
†Van Horn, Kent R.....	1606 Compton Rd., Cleveland Heights, Ohio. '27
van Houten, Jan, Pres., St. Louis, Rocky Mt. & Pacific Co.....	Raton, N. M. '17
Vanick, James S., Met., International Nickel Co.....	67 Wall St., New York, N. Y. '21
Van Law, Carlos Whitney, Cons. Engr., American Smelt. & Refin. Co., 120 Broadway, New York, N. Y.	'29
van Lier, R. J.....	Dedel Str. 3B, The Hague, Netherlands. '18
†Van Lierde, Joseph, Engr.....	Sottegem, Belgium. '20
Van Nes, Cornelis Leonard, Min. Engr., Prof., Technische Hoogeschool.....	Delft, Holland. '29
Van Orstrand, C. E., Geophysicist, U. S. Geol. Survey.....	Washington, D. C. '23
Van Pelt, J. Robert, Jr., Curator of Mineral Industries Div., Rosenwald Industrial Museum, 300 W. Adams St., Chicago, Ill.	'20
Van Sielen, Matthew, Min. Engr., Cosmos Club.....	Washington, D. C. '12
Van Slyke, W. Ralph, Min. Engr., Supt. for Fee Owners of Min. Properties, 301 McKinley Ave., Eveleth, Minn.; Robinson & Flinn, Detroit, Mich.; The Fowler Estate, Pasadena, Cal.	'20
Van Tuyl, Francis M., Prof., Geol. & Mineralogy, Colorado School of Mines, Golden, Colo.	'19
VanValkenburgh, R. R., Supt., Mt. Hope Mine, Warren Fdry. & Pipe Corp., R. F. D. Wharton, N. J.	'15
VanWagenen, Hugh R., Min. Engr., Bartlett Bldg.....	Los Angeles, Cal. '17
van Weelden, Arie, Geophysicist, De Bataafsche Petroleum Maatschappij, 30 Carel van Bylandtlaan, The Hague, Holland.	'29
Van Winkle, C. T., Min. Engr.....	319 Dooly Block, Salt Lake City, Utah. '12
Varney, F. W., Gen'l Contractor, F. W. Varney & Co., 360 Bush St., San Francisco, Cal.	'17
Vauclain, Samuel M., Pres., The Baldwin Locomotive Works, 123 So. Broad St., Philadelphia, Pa.	'96
Vaughan, Francis Edward, Geol., Shell Co. of California....	Higgins Bldg., Los Angeles, Cal. '13
Vazquez, D. A., Cuban-Canadian Sugar Co., S. A., Ingenio Rio. Cauto, Oriente, Cuba.	'17
Veach, Charles W., Open Hearth Supt., Bettendorf Co.....	Bettendorf, Iowa. '28
Veatch, A. C., Pres., Sinclair Exploration Co.....	45 Nassau St., New York, N. Y. '17
Vedder, Dwight Gregory, Oil Geol. & Operator, 408 Quinby Bldg., 650 So. Grand Ave., Los Angeles, Cal.	'27
¶Vedensky, D. N., Met., Treadwell Yukon Co., Ltd.....	820 Parker St., Berkeley, Cal. '25
Velte, Ralph C., V.P., Valley Mould & Iron Corp.....	Hubbard Ohio. '27
Venables, H. L., Min. & Cons. Engr.....	Casilla 292, Oruro, Bolivia. '08
¶Ventre, Thomas.....	146 N. Main St., Old Forge, Pa. '27
¶Ver Bunker, Earl M., Min. Engr., Montreal Min. Co.....	Montreal, Wis. '26
†Verdussen, Jean A. C., Asst. Supt., Leaching Plant, Min. Engr., Usines de Chituru, Union Miniere du Haut Katanga, Panda, Katanga, Belgian Congo, W. Africa.	'26
¶Verity, Victor H., Met. Clerk, The Motezuma Copper Co., Hotel de Nacoziari, Nacoziari, Son., Mexico.	'27
¶Vermaire, Abraham, Min. Engr., Geol. Dept., Bethlehem Steel Co.....	Bethlehem, Pa. '23
Vickery, Frederick P., Geol., Miley Oil Co.....	Pacific Finance Bldg., Los Angeles, Cal. '27
¶Vickery, Lloyd W.....	421 South Second, Blackwell, Okla. '29
¶Vickery, Ward Rollin, Geol., Geophysical Engr., Vernon Oil & Gas Co....	Blackwell, Okla. '28
Vidler, Louis W., Min. Engr., Gen'l Mgr., Westcliffe Dev. Trust, 1306 Wood Ave., Colorado Springs, Colo.	'26
¶Vietti, William Victor, Pet. Engr., Mariand Production Co.....	Big Spring, Tex. '28
¶Vigeon, H. Donald, Lago Pet. Corp.....	Apt. 172, Maracaibo, Venezuela. '21
Villafana, Manuel.....	Apt. 16, Matehuala, S. L. P., Mexico. '26
¶Villaume, Frederick Henry, Sales Engr., Nickel Dept., International Nickel Co. Inc., 67 Wall St., New York, N. Y.	'22
¶Vincent, Will Pierre, Min. Engr.....	Box 51, Burke, Idaho. '27
¶Vishnevsky, N. N., Utah Copper Co.....	Arthur Plant, Arthur, Utah. '22
Vissac, Gustave Andrew, Gen'l Mgr., West Canadian Collieries, Ltd., Blairmore, Alta., Canada.	'27
¶Vivian, George F., Min. Engr., Chief Sampler, Anaconda Copper Min. Co., 525 Hennessy Bldg., Butte, Mont.	'18
Vogel, Felix A., Cons. Engr. & Geol.....	Hillcrest, Dolgeville, N. Y. '06
Vogel, Herman H., Supt., Barton Mines Corp.....	North Creek, N. Y. '29

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†Vogelstein, Ludwig, V.P., American Metal Co., Ltd.....	61 Broadway, New York, N. Y.	'06
Volker, H. J., Min. Engr., Supt., Hanlon-Gregory Galvanizing Co.....	Pittsburgh, Pa.	'17
Von Bernewitz, M. W., Bureau of Mines Experiment Station,		
	4800 Forbes St., Pittsburgh, Pa.	'26
von Buelow, Ernst Ulrich, Geol. & Cons. Geophysicist.....	509 17th St., Denver, Colo.	'28
von Eckermann, Harry, Met. & Min. Engr., Pres., Ljusne-Woxna Co., Ltd., Ljusne, Sweden.		'23
von Maltitz, Edmund, Met. Engr., H. A. Brassert & Co.....	1613 Strauss Bldg., Chicago, Ill.	'06
von Muecke, Kurt, Geol. & Geophysicist.....	1417 Esperson Bldg., Houston, Tex.	'25
von Seyfried, Rudolf, Supt., Copper Smelt. & Refin., Balbach Smelt. & Refin. Co.,		
	580 Market St., Newark, N. J.	'07
Voorhees, A. Willard, Geol.....	421 N. Campbell Ave., Tucson, Ariz.	'23
Voorhees, Edward C., Met., Erie Forge & Steel Co.....	Erie, Pa.	'19
†Vorfeld, Robert H., Order of Merit, 1st Class, Gov't of Ecuador, Mar. 15, 1927. Special		
Expert, U. S. Tariff Commission, Washington, D. C.		'19
Vosburg, George F., Gen'l Supt., St. Louis Gas & Coke Corp.....	Granite City, Ill.	'28
Vose, Charles, Jr.....	140 Columbia Blvd., Waterbury, Conn.	'23
Vose, Richard Hampton, Civ. & Min. Engr., Robert W. Hunt & Co.		
	2200 Insurance Exchange, Chicago, Ill.	'20
Vrang, Christion, Pet. Geol.....	18 Locust Ave., Long Beach, Cal.	'15
†Wade, Henry H., Met., Minnesota School of Mines, Experiment Station..	Minneapolis, Minn.	'19
Wade, James W., Asst. Gen'l Mgr., Tintic Standard Min. Co.,		
	1111 Walker Bank Bldg., Salt Lake City, Utah.	'21
Wade, W. R., V.P., Engineers Exploration Syndicate.....	120 Broadway, New York, N. Y.	'10
Wadhams, A. J., File Room, International Nickel Co., Inc.....	67 Wall St., New York, N. Y.	'17
Wadleigh, Francis R., Cons. Min. & Fuels Engr., Wadleigh & Bailey,		
	1 Broadway, New York, N. Y.	'13
†Wadleigh, Francis R., Jr., Supt's Asst., Hunts Point Sta., Consolidated Gas Co.,		
	163rd St. & East River, Bronx, N. Y.	'23
Wadsted, Bengt, Chem. Engr., Dorr Gesellschaft M. B. H., Joachimsthalerstr. 10,		
	Berlin W 15, Germany.	'25
Waechter, I. Edmund, Gen'l Supt., L. N. N. Foundry Co.,		
	17204-Waterloo Rd., Cleveland, Ohio.	'18
**Wagner, Delbert R., Jr., Engr., Bethlehem Steel Corp.....	Bethlehem, Pa.	'29
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Wagner, Paul, <i>National Petroleum News</i> .....	2020 Gulf Bldg., Houston, Tex.	'23
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Wagy, Earl W., Pet. Engr.....	Standard Oil Bldg., San Francisco, Cal.	'27
Wahl, Andrew John, Asst. Engr., Hecla Min. Co.....	Burke, Idaho.	'25
Wahl, Roy Lesslie, Chief Min. Engr., Inland Steel Co.....	Ironton, Minn.	'17
Wahlberg, Axel, Chief Tech. Adviser, Jernkontoret.....	Stockholm, Sweden.	'26
Wainwright, William E., Gen'l Mgr., Broken Hill South Ltd., Collins House,		
	360 Collins St., Melbourne, Vic., Australia.	'03
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Waite, Henry M., Chief Engr., Cincinnati Union Terminal Co., Temple Park Bldg.,		
	Cincinnati, Ohio.	'11
Walbridge, A. L., Dist. Supt., The Lehigh Coal & Navigation Co.....	Hazleton, Pa.	'23
Waldner, C. E. de La Garde, Prod. Foreman, Honolulu Cons. Oil Co.....	Taft, Cal.	'21
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Walker, Alexander, Min. Engr., Chile Exploration Co.....	Chuquicamata, Chile.	'21
†Walker, Alfred E.....	Iron Mountain, Mo.	'25
Walker, Arthur James, Production Supt., Anderson-Prichard Oil Corp.,		
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Walker, Edwin Harold, Mine. Mgr., Kambove Mine, Union Minière du Haut Katanga,	
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	Apt. 13, Chihuahua, Chih., Mexico. '20
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Walker, Morgan, Pet. Engr., Amerada Pet. Corp.....	Tulsa, Okla. '28
Walker, Myron R., Min. Engr., U. S. Tariff Commission.....	Washington, D. C. '07
Walker, Pierce C., Min. Engr., Record Min. Co.....	Unity, Ore. '24
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Walker, Robert T., Field Engr., U. S. Smelt., Refin. & Min. Co.,	
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Walker, Stanley S.....	Hutchinson, Minn. '29
Walker, W. F., Chief Geol., Cerro de Pasco Copper Corp.....	Oroya, Peru. '27
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Walker, William J., Supt., Central Park Mines Co.....	Box 698, Park City, Utah. '21
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	Balfour Bldg., San Francisco, Cal. '29
Wallace, George W.....	2305 First National Bank Bldg., Pittsburgh, Pa. '26
Wallace, H. Mitchell, Mgr., Ansonia Branch, The American Brass Co.....	Waterbury, Conn. '27
Wallace, L. R., Min. & Met. Engr.....	Rancho Santa Fe, San Diego Co., Cal. '15
Wallace, Robert.....	Midvale, Utah. '1
Wallage, Stanley T., Supt., Sulfating Plant, American Smelt. & Refin. Co.....	Durango, Colo. '20
Walle, Michael P., Research Engr., Koppers Rheolaveur Corp.,	
	911 Coal Exchange Bldg., Wilkes-Barre, Pa. '26
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Wallin, Gustaf, Min. Engr.....	Heimdalsvagen 12, Djursholm, Sweden. '02
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Wallower, Edgar Z., Pres., Evans-Wallower Lead Co.....	118 E. 4th St., Joplin, Mo. '28
Wallower, F. C., V.P. & Gen'l Mgr., Golden Rod Min. & Smelt. Corp.....	Joplin, Mo. '12
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Walsh, David F., Instr., Dept. of Met., Missouri School of Mines.....	Rolla, Mo. '28
Walsh, H. T., V.P., Sullivan Machinery Co.....	400 N. Michigan Ave., Chicago, Ill. '16
Waltenberg, R. G., Met., H. A. Wilson Co.....	97 Chestnut St., Newark, N. J. '20
Walter, A. B., Sales Engr., Conveyor Sales Co.....	2725 Magnolia Ave., Knoxville, Tenn. '24
Walter, A. R., Asst. Supt., Iron Concentrating Plant & Others, Bethlehem Steel Co.,	
	Lebanon, Pa. '16
Walter, Adolph S., Prof., Min. & Met., New Mexico School of Mines.....	Socorro, N. M. '28
Walter, Herbert W., Asst. Gen'l Mgr., The International Nickel Co. of Canada, Ltd.,	
	Port Colborne, Ont., Canada. '17
Walter, Raymond A., Cons. Engr.....	299 Broadway, New York, N. Y. '15
Walters, George D., Supt., Open Hearth & Blooming Mill, Atlantic Steel Co.....	Atlanta, Ga. '27
Walters, George W., Dist. Mgr., Traylor Engrg. & Mfg. Co.,	
	815 Alaska Bldg., Seattle, Wash. '27
Walters, J. D., Supt., Open Hearths, Lukens Steel Co.....	Coatesville, Pa. '29
Walters, Mason G., Geol., The Sloan & Zook Co.....	101 Main St., Bradford, Pa. '28
Walters, Ray E., Min. Engr.....	Box 1414, Missoula, Mont. '14
**Waltien, Robert R., Copper Refin. Research Wk., Research Asst., Nichols Copper Co.,	
	Laurel Hill, L. I., N. Y. '30
Waltman, William D., Panama Canal Medal, 1910; V.P., Franco Wyoming Oil Co.,	
	551 5th Ave., New York, N. Y. '14
Walton, J. W., Mine Foreman, Chosen Syndicate, Ltd.....	Taiyudong, Chosen (Korea). '20
Wanamaker, E. M., Met. Engr.....	Giesche Spolka Akcyjna, Katowice, Poland. '24
Wandke, Alfred, Min. Geol., Mgr., The Guanajuato Consolidated Min. & Mill. Co.,	
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Wang, Y. Tsensham, Min. Geol., Highway & Cons. Engr. 603 Avenue Foch, Shanghai, China.	'13
Ward, A. T., Coal.....	50 Church St., New York, N. Y. '16
Ward, Harold D.....	320 W. 23rd St., Oklahoma City, Okla. '29

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Ward, Howard R., Min. Engr., Société Chimique du Chrome, rue Sebastopol, Noumea, New Caledonia.	'16
Ward, R. J.....	'21
†Ward, William Ambrose.....	'22
Wardlaw, Frank Andrew, Jr., Gen'l Supt. of Mines, International Smelt. Co., 814 Kearns Bldg., Salt Lake City, Utah.	'21
Wardner, W. R., Min. & Pet. Engr., Boston Pet. Co.....	'21
Warfield, William.....	'21
Warford, Norman L., Pulverized Fuel Engr., U. S. Metals Refin. Co.....	'15
Waring, W. George, Chem. Engr., Prop., Waring Research Laboratories, 126 N. Webb St., Webb City, Mo.	'17
‖Warncke, Russell G., Min. Engr.....	'23
Warner, C. A., Geol. & Dist. Mgr., Houston Oil Co. of Texas, 718 World Bldg., Tulsa, Okla.	'20
Warner, Charles M., Supt., Herculeaneum Div., St. Joseph Lead Co.....	'14
‖Warner, Eldred E., Kansas City Rep. of Ingersoll-Rand Co., Ingersoll-Rand, Inc., 1600 Baltimore, Kansas City, Mo.	'25
‖Warner, James Douglas, Sampler, Anaconda Copper Min. Co., 525 Hennessy Bldg., Butte, Mont.	'24
Warner, Julius H., Min. Geol.....	'07
Warner, Munroe F., Mech. & Elect. Engr., Chief Engr., American Zinc & Chem. Co., Langeloth, Pa.	'21
‖Warner, Ralph E., Student, University of Pittsburgh.....	'28
Warner, Robert K., Min. Engr., Asst. Prof. of Min., Hammond Lab., Yale University, New Haven, Conn.	'13
Warner, Thor, Cons. Pet. Geol....	'10
Warner, W. W.....	'28
‖Warnken, Louis, Jr.....	'24
Warnock, David W.....	'27
Warren, Frank M., Min. Engr., Director, V.P., Engr., Pine Land Co., 1224 First National-Soo Line Bldg., Minneapolis, Minn.	'10
Warren, Harry M., Cons. Engr., Glen Alden Coal Co.....	'15
**Warren, Howard C., Resident Geophysicist, Empire Oil & Refin. Co., 314 Petroleum Bldg., Houston, Tex.	'29
Warren, S. Power, Cons. Engr., Asst. Prof. of Met., Colorado School of Mines, 914 19th St., Golden, Colo.	'27
Warren, Van Court, Cons. Geol. & Val. Engr., 812 Subway Terminal Bldg., Los Angeles, Cal.	'23
Warriner, Jesse B.....	'14
Warriner, Ruel C., Pres., Continental Mines, Ltd., & Menago Min. Co., Ltd., V. P., Mines & Commerce of Delaware, 25 Broadway, New York, N. Y.	'03
Warriner, S. D., Pres., Lehigh Coal & Navigation Co....	'91
Wartenweiler, Fred, Cons. Met., Johannesburg Cons. Investment Corp., Ltd., Box 231, Johannesburg, Transvaal, S. Africa.	'03
Wartenweiler, Otto. ....	'26
Wash, Edwin R., Supt., Bethlehem Mines Corp.....	'08
Washburn, Howard G., Federal Min. & Smelt. Co.....	'16
‖Washburn, Thomas S., Met., Research Dept., Inland Steel Co.....	'27
Washburne, Chester W., Cons. Geol.....	'09
Wasley, W. A., Supt., The Tigre Leasing Co., El Favor Mine....	'16
Wasson, H. J.....	'16
Wasteney, Geoffrey M., Cia. de Inversiones Del Oro, S. A., Apt. 13, El Oro, E. de Mexico, Mex.	'18
Waterfield, J. B., Met. Engr. & Mfr.'s Agent.....	'27
Waterhouse, George B., Cons. Met., Prof. of Met., Mass. Inst. of Tech..	'14
Waterhouse, Leslie V., Cons. Min. Engr. & Met., Wingello House, Angel Pl., Sydney, N. S. W., Australia.	'16
‖Waterland, T. M.....	'24
Waters, Charles Richard, Tom Reed Mine, Tom Reed Gold Min. Co.....	'23
Watkins, Alexander Earley, Asst. to V.P. & Gen'l Mgr., Hudson Coal Co....	'21
‖Watkins, Edgar G., Engrs.' Asst., Gas Mfg. Dept., Consolidated Gas Co. of New York, 4 Irving Pl., New York, N. Y.	'28
Watkins, Joel H., Geol.....	'14
Watrous, Harry C., Robert W. Hunt & Co.....	'21
†Watson, Cresap P., Pres., Federal Royalties Co., Inc., 1809 Electric Bldg., Fort Worth, Tex.	'21
Watson, F. Whalley, Min. Engr., Pres., Portland Vegetable Oil Mills Co., 580 N. Front St., Portland, Ore.	'24
Watson, Nicholas Ord, Gen'l Supt., Caribbean Pet. Co.....	'25
Watson, Ralph A., Cons. Engr., Ralph A. Watson Co.....	'17
Watson, William N., Chief Research Chem., Rhodesia Broken Dev. Co., Ltd., Broken Hill, N. Rhodesia, Africa.	'22

Watson, William Weldon, IV, Jr. Met., Miami Copper Co.....	Miami, Ariz.	'25
†Watson, MacInnes, John, Draftsman, The Consolidated Min. & Smelt. Co. of Canada, Tadanac, B. C., Canada.	Franklin, N. J.	'28
Watt, Arthur G., Asst. Mine Foreman, The New Jersey Zinc Co.....	Coalwood, W. Va.	'20
**Watt, Ralph B., Min. Engr.....	924 Kearns Bldg., Salt Lake City, Utah.	'29
Watts, Alfred C., Cons. Min. Engr.....	Moctezuma Copper Co., Pilares de Nacozari, Son., Mexico.	'20
Waugh, Keith W., Mine Div. Engr.,		'27
Way, Edward J., Cons. Engr., Ariston Gold Mines, Ltd., Gold Coast Selection Trust, Standard Bank of South Africa, 10 Clements Lane, London, E. C. 4, England.	Cambridge, Mass.	'02
Way, John, Student, Mass. Inst. of Tech.....	Center Point, Ind.	'29
Way, Karl M., Min. Engr., Bradway Coal Co.....	Lead, S. D.	'10
Wayland, R. G., Asst. Gen'l Mgr., Homestake Min. Co.....	Erith, Kent, England.	'07
Waymark, D. H., Engr., Messrs. Fraser & Chalmers Engrg. Works,	Duluth, Minn.	'24
Wearne, William, Gen'l Supt. of Mines, Inland Steel Co., 2422 E. 3rd St.,		'09
Weaver, Harry F., Sectional Foreman, The Hudson Coal Co., Loree 5 Colliery, Plymouth, Pa.		'26
Weaver, Paul, Geol., Gulf Production Co.....	Drawer C, Houston, Tex.	'28
Webb, E. H., Pres., The Webb Wire Wks.....	New Brunswick, N. J.	'10
Webb, Francis J., Gen'l Mgr. Northern Ore Mines, Republic Iron & Steel Co., 1405 Alworth Bldg., Duluth, Minn.		'21
Webb, H. H., Cons. Min. Engr.....	Summit Road, Santa Barbara, Cal.	'85
Webb, H. Carlyon, Min. Engr.....	Sedgeford Rd., London W. 12, England.	'28
Webb, Henry F., Mgr., Machinery Dept., The Mine & Smelter Supply Co., Salt Lake City, Utah.		'27
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Webster, Hosea, Mgr., New York Sales Dept., Babcock & Wilcox Co., 85 Liberty St., New York, N. Y.		'95
Webster, Paul W., Cons. Engr.....	175 5th Ave., New York, N. Y.	'98
Webster, W. Reuben, V.P., Bridgeport Brass Co.....	Bridgeport, Conn.	'18
Webster, William R., Cons. Insp. Engr.....	3818 Chestnut St., Philadelphia, Pa.	'92
Weck, Charles A., Min. Engr.....	3425 Champion St., Oakland, Cal.	'97
Wedlake, George N., Physical Met., Cockshutt Plow Co., Ltd.....	Brantford, Ont., Canada.	'27
Weed, Clyde E., Gen'l Mgr., Cananea Cons. Copper Co.....	Cananea, Son., Mexico.	'25
Weed, Robert C., Met., Minnesota Steel Co., Box 17, Morgan Park Station,	Duluth, Minn.	'16
Weed, Walter Harvey, Min. Engr., c/o William Weiss, 217 Broadway,	New York, N. Y.	'98
Weekes, Frederic R., Min. Engr., Cons. Min. Engr., 409 Canada Cement Bldg., Montreal, Que., Canada.		'07
Weeks, Frank E., Sec. & Gen'l Mgr., Velie Mines Corp., 117 N. Moffet Ave.,	Joplin, Mo.	'25
Weeks, L. G., Standard Oil Co., S. A., Argentina, Edificio Banco Boston, Avenida Roque Saenz Pena, 567, Buenos Aires,	Argentina.	'18
Weeks, Walter S., Prof. of Min., Hearst Min. Bldg., Univ. of Cal.....	Berkeley, Cal.	'09
Weeks, Warren B., Student, University of Oklahoma.....	Norman, Okla.	'28
Wegemann, Carroll H., Chief Geol., Pan American Pet. & Transport Co., 122 E. 42nd St., New York, N. Y.		'19
Weichel, Edgar C., Min. Engr., Hudson Coal Co.....	Scranton, Pa.	'23
Weichel, Ludwig Frank, Colliery Supt., Hudson Coal Co.....	Scranton, Pa.	'21
Weidlein, Edward R., Chemist & Chem. Engr., Dir., Mellon Institute of Industrial Research, Univ. of Pittsburgh, Pittsburgh, Pa.		'22
Weidman, Samuel, Geol., Prof. of Geol., Univ. of Oklahoma.....	Norman, Okla.	'20
Weigall, Arthur R., The Seoul Min. Co., Suan Mine, Holkol, Whang Hai Prov., Chosen (Korea)		'98
Weigall, H. S., Mngng. Dir., c/o H. Hunter, The Toyo Mines, Ltd., 1 Enokizaka-Machi, Akasaka-ku, Tokyo, Japan.		'12
Weigel, William M., Mineral Technologist, Missouri Pacific Railroad Co., Missouri Pacific Bldg., St. Louis, Mo.		'27
†Weigel, W. W., Engr., St. Joseph Lead Co.....	Leadwood, Mo.	'19
Weikel, John H., Research Investigator, The New Jersey Zinc Co.....	Palmerton, Pa.	'29
Weiner, Rudolph S., Dist. Mgr., Sullivan Machinery Co.....	Chicago, Ill.	'21
Weinig, A. J., Dir., Experimental Ore Dressing & Met. Plant, Colorado School of Mines, Golden, Colo.		'15
Weintz, Clement A., Field Geol., Midwest Refin. Co.....	Denver, Colo.	'27
Weintz, L. J., Engr., Charge of Milling, Service & Maintenance, The Bertha Mineral Co., Austinville, Va.		'16
Weinzierl, John Frederick, Cons. Geol. & Geophysicist....	619 Petroleum Bldg., Houston, Tex.	'27
Weir, George, Min. Engr.....	84 Princess St., K. E. W., Melbourne, Vic., Australia.	'00
Weir, John A., Asst. Prof. of Civ. Engrg. & Geol., New Mexico School of Mines, Socorro, N. M.		'19
†Weir, John Campbell, Min. Broker.....	25 Broad St., New York, N. Y.	'20



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Weir, Paul, V.P. in charge of Operations, Bell & Zoller Coal & Min. Co.; Centralia Coal Co., Centralia, Ill.	'20
Weir, Thomas, Min. Engr., Mine Mgr.....Room 422, Dooly Bldg., Salt Lake City, Utah.	'90
Weisenburg, Andrew, Min. Engr., Bond Mfg. Co., 501 Monroe St., Wilmington, Del.	'14
Weisenburg, Leonard E.....253 N. Vermont Ave., Los Angeles, Cal.	'19
Weiser, Franklin S., Research Engr., Scovill Mfg. Co.....Waterbury, Conn.	'20
¶Weiss, Harold K., Graduate Student, Lehigh Univ.....Bethlehem, Pa.	'27
¶Weissenborn, Albert E.....312 N. Fullerton Ave., Montclair, N. J.	'27
¶Weitzenhofer, Harold S., Met., Bethlehem Steel Co.....Bethlehem, Pa.	'26
¶Welborn, Jesse F., Pres., Colorado Fuel & Iron Co.....Denver, Colo.	'13
Welch, Harry V., Chem. & Met. Engr., Chief Chem., Western Precipitation Co., 1016 W. 9th St., Los Angeles, Cal.	'17
Welch, Howard K., Min. Engr., Mines Prospecting Co., 84 W. Pennington St., Tucson, Ariz.	'17
Welch, J. Cuthbert, Chief Test. Engr., International Smelt. Co.....Tooele, Utah.	'26
Weld, C. Minot, Cons. Min. Engr.....2 Rector St., New York, N. Y.	'01
Weldin, William Archie.....417 Grant St., Bakewell Bldg., Pittsburgh, Pa.	'18
Welhaven, Alfred, Gen'l Mgr., Oriental Cons. Min. Co., Hokuchin, Unsan, Chosen, Korea; Gen'l Mgr., Insular Lumber Co., Box 456, Manila, P. I.	'07
¶Welker, Kenneth K., Geol., Champion Copper Co.....Painesdale, Mich.	'27
Wel'ing, Charles H., V.P., Trent Process Corp. & Gasoline Products Co., Inc., 52 Broadway, New York, N. Y.	'27
Wellington, William John, Mill Supt., Tregoning Villa, Ashton, Helston, Cornwall, England.	'26
Wellman, W. H., Gen'l Flotation Foreman, Cia. Minera Asarco, S. A., Parral, Chih., Mexico.	'17
Wells, Arthur E., Prof. of Met., Harvard Engrg. School.....Cambridge, Mass.	'16
Wells, Bulkeley, Metal Min.....Hobart Bldg., San Francisco, Cal.	'03
Wells, Edgar H., Pres. & Prof. of Geol. & Mineralogy, New Mexico State School of Mines, Socorro, N. M.	'22
¶Wells, O. W., Pres., Southern Exploration Co., Inc., 90 West St., New York, N. Y.	'25
¶Wells, Samuel Webster.....Box 1266, Okmulgee, Okla.	'18
Welsh, H. Lee, Cons. Geol.....201 Hedden Bldg., Billings, Mont.	'13
Welsh, L. G., Geol. & Oil Producer, Smith & Welsh.....Box 289, Abilene, Tex.	'18
¶Wemple, Holland R., Sales Mgr., Texas Gulf Sulphur Co., 75 E. 45th St., New York, N. Y.	'21
Wemple, Leland E., Pres., Illinois Zinc Co.....332 S. Michigan Ave., Chicago, Ill.	'16
Wenger, Frank B., Engr., Manganiferous Iron Co.....Deerwood, Minn.	'21
Wensley, Roger L., Min. Engr., G. M. Basford Co., 17 E. 42nd St., New York, N. Y.	'16
Wenstrom, Olof, Min. Engr.....24 Federal St., Boston, Mass.	'83
Wentworth, Henry A., Cons. Engr.....55 Congress St., Boston, Mass.	'11
Wentworth, Irving H., Accountant, Mines Corp. of Sonora.....Douglas, Ariz.	'28
Wentz, W. W., Met., Aluminum Co. of America.....New Kensington, Pa.	'28
Werchowsky, E., Supt., Coal Washing & Preparation Dept., Consolidated State Mine of Donetz Coalfields "Donoogol," Pl. Tevelev, 28, Kharkoff, U.S.S.R.	'10
Wernecke, Livingston, Min. Engr. & Geol., Gen'l Supt., Treadwell Yukon Co., Ltd., Mayo, Y. T., Canada.	'14
¶Werner, Jules H., Cardinal Hotel.....243 West End Ave., New York, N. Y.	'26
¶Werner, Raymond F., Transitman & Asst. Min. Engr., Madeira Hill Coal Min. Co., Philipsburg, Pa.	'24
Wescott, Ernest W., Comstock & Wescott, Inc.....Box 918, Niagara Falls, N. Y.	'27
Wescott, William P., V.P., Galena Signal Oil Co., Liggett Bldg., 41 E. 42nd St., New York, N. Y.	'10
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West, Harlem E.....I. Howard Canfield Bldg., Santa Barbara, Cal.	'00
Westby, Gerald H., Geol., in Charge Geophysical Exploration, Geol. Dept., Empire Oil & Refin. Co., Bartlesville, Okla.	'29
Westervelt, Edmund W., V.P. & Sec., Dixie Gravel Co.....Gainesville, Ga.	'13
Westervelt, William Young, Cons. Min. Engr., Pres., Ducktown Chemical & Iron Co., 522 5th Ave., New York, N. Y.	'95
¶Westin, Clinton E., Smelter Engr.....Clarkdale, Ariz.	'27
¶Westlake, Emory H., c/o A. Lewisohn & Sons.....61 Broadway, New York, N. Y.	'12
Weston, Charles V., Cons. Engr., Chicago Surface Lines, Room 1485, 231 South La Salle St., Chicago, Ill.	'14
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¶Wethey, A. H., Jr., Pres., Standard Brick & Tile Co.....Box 4207, Portland, Ore.	'23
Wethey, Arthur H., c/o The Librarian, American Chamber of Commerce, 32, Rue Taitbout, Paris, France.	'96
Wettstein, Thomas F., Mgr., Keokuk Plant, United Lead Co.....Keokuk, Iowa.	'18
Weyland, Alvin H., Supt. of Oil Production in Arkansas & Louisiana, Arkansas Natural Gas Corp., Shreveport, La.	'29

- Whalen, A. Floyd, Met. & Asst. Supt., Open Hearth, Harrisburg Pipe & Pipe Bending Co.,  
Harrisburg, Pa. '2
- Whalen, James Ternes, Mine Foreman & Res. Engr., Sheridan Coal Co.....Hudson, Wyo. '3
- Whaley, George C., Mech. Supt., St. Louis Smelt. & Refin. Wks., National Lead Co.,  
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- Wheeler, Bleecker L., Senior Engr., Ford, Bacon & Davis, Inc.,  
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- Wheeler, Burr, Gen'l Mgr., Chile Exploration Co.....Chuquicamata, Chile. '2
- Wheeler, Edwin S., Supt., The International Nickel Co.....Oak St., Bayonne, N. J. '2
- Wheeler, H. A., Cons. Oil & Min. Engr.....Security Bldg., St. Louis, Mo. '3
- †Wheeler, H. R., Min. Engr., Pittsburgh Coal Co.....Oliver Bldg., Pittsburgh, Pa. '2
- Wheeler, L. F., Met., Singer Mfg. Co.....Elizabeth, N. J. '2
- Wheeler, Raymond A., Engr., New Quincy Min. Co.....Park City, Utah. '2
- Wheelock, C. W., Min. Engr.....2 Rector St., New York, N. Y. '2
- Whetsel, Raymond V., Gen'l Mgr., Cia. Gas y Combustible "Imperio",  
Apt. 285, Tampico, Tamps., Mexico. '2
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Hearn Ave., & Detroit Terminal R. R. East, Detroit, Mich. '0
- Whitaker, Herbert, Met., Michigan Copper & Brass Co., 5851 W. Jefferson St., Detroit, Mich. '2
- Whitaker, Orvil R., Min. Engr.....932 Equitable Bldg., Denver, Colo. '9
- White, Albert E., Prof. of Met. Engrg. & Dir., Dept. of Engrg. Research, Univ. of Michigan,  
Ann Arbor, Mich. '1
- White, Arthur S., Gen'l Mgr., Rock Springs Fuel Co.....Rock Springs, Wyo. '2
- ||White, Athington, Min. Engr., Stope Engr., Old Dominion Copper Co.,  
Box 2101, Globe, Ariz. '2
- White, Charles Henry, Cons. Geol.....593 Mills Bldg., San Francisco, Cal. '0
- White, David, Principal Geol., U. S. Geol. Survey.....Washington, D. C. '1
- White, Edmond A., Min. Engr.....Port Kembla, N. S. W., Australia. '0
- White, Edwin E., Pet. Geol. & Min. Engr., Gen'l Mgr., Boston & Southwestern Oil & Gas Co.,  
Box 595, Paintsville, Ky. '0
- White, Eugene A., Gen'l Supt., Tacoma Smelter, American Smelt. & Refin. Co.,  
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- †White, Francis Guy.....718 Trinity Ave., University City, Mo. '2
- White, George E., Min. Engr.....1206 Pacific Mutual Bldg., Los Angeles, Cal. '1
- ||White, H. Brooks, Foreman, Radiator Reclamation Dept., White & Bros., Inc.,  
Bridensburg, Philadelphia, Pa. '2
- †White, H. Vance, Met. & Chem., Berry Iron & Steel Co.....St. Joseph, Mo. '2
- White, Harold, Min. Engr., Atlas Powder Co.....St. Louis, Mo. '2
- White, Harold Edwards, Lava Crucible Co. of Pittsburgh.....Zelenople, Pa. '1
- White, Henry Arthur, Cons. Met., Union Corp., Ltd.,...P.O. Dersley, Transvaal, S. Africa. '2
- White, J. A., Min. Engr., Supt., Yellow Pine Syndicate.....Yellow Pine, Idaho. '2
- White, J. E., Cons. Engr.....700 Belinda Ave., Bay City, Mich. '2
- White, J. Lansing, Chief Engr., Cinco Minas Co.....Magdalena, Jal., Mexico. '1
- White, Kessack D., Pet. Geol.,  
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- White, Lloyd C., Cons. Engr., Hershey & White...924 Crocker Bldg., San Francisco, Cal. '2
- ||White, Norman R., Min. Geol., Cerro de Pasco Copper Corp.....Cerro de Pasco, Peru. '2
- ||White, Roland F., Gulf Oil Corp.....c/o P. D. Foote, Mellon Inst., Pittsburgh, Pa. '2
- White, Rush J., Min. Engr. & Geol.....Box 1003, Wallace, Idaho. '0
- White, Willard O., Resident Engr., W. J. Rainey, Fayette Title & Trust Bldg.,  
Uniontown, Pa. '2
- Whiteford, William K., Supt., Barnsdall Oil Co. of Oklahoma,  
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- Whitehead, W. L., Cons. Geol.....222 Charles River Rd., Cambridge, Mass. '1
- Whiteley, Eugene E., Asst. Supt. of Mines, Calumet & Arizona Min. Co.....Warren, Ariz. '0
- Whiting, Lowe.....Columbia University Club, 4 W. 43rd St., New York, N. Y. '2
- Whiting, M. A., Industrial Engrg. Dept., General Electric Co.....Schenectady, N. Y. '1
- Whitman, Alfred R., Asst. Prof. of Geol., Univ. of California.....Los Angeles, Cal. '1
- Whitman, Alvin D., Supt., Shell Pet. Corp.....Box 112, Big Spring, Tex. '2
- Whitman, Roy V., Min. Engr., Supt. (Eastern Venezuela), Creole Pet. Corp.,  
Maturin, Venezuela. '2
- Whitmore, H. B., Johns-Manville Corp., 3rd Floor, Madison Ave. & 41st St., New York, N. Y. '2
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†Whitney, Henry M., Min. Engr., Cerro de Pasco Copper Co.....	Morococha, Peru.	'23
Whitney, Loren L., Supt., American Steel Foundries.....	403 Hohman St., Hammond, Ind.	'25
Whitney, W. R., Director, Research Laboratory, General Electric Co.....	Schenectady, N. Y.	'02
Whittek, William H., Mgr., Oil Well Supply Co.....	25 Broadway, New York, N. Y.	'28
Whittier, Charles C., Cons. Engr., Robert W. Hunt Co., 2200 Insurance Exchange Bldg., Chicago, Ill.		'11
Whittier, W. H., Shell Oil Co.....	403 Higgins Bldg., Los Angeles, Cal.	'16
Whitwell, E. V., Geol., Hudson's Bay, Marland Oil Co., 412 McLeod Bldg., Edmonton, Alta., Canada.		'19
Whitzel, R. T., Wks. Mgr., U. S. Aluminum Co.....	Massena, N. Y.	'29
Whyte, Frederick W. C., Gen'l Mgr., Coal Departments, Anaconda Copper Mining Co., Anaconda, Mont.		'00
†Whyte, George S., Pres. & Gen'l Mgr., MacWhyte Co.....	2906 14th Ave., Kenosha, Wis.	'19
Whyte, W. deBurgh.....	4 Toy Gardens, Camp Hill, London, W.8, England.	'18
Wichman, Frank M., Min. Engr., Plant Engr., U. S. Smelt. Co.....	Midvale, Utah.	'18
Wichmann, Arthur P., Braden Copper Co.....	Rancagua, Chile.	'24
Wickersham, N. W., Engr., Perkins Cementing, Inc., Room 707, 714 W. 10th St., Los Angeles, Cal.		'21
Wickes, L. Webster, Min. & Met. Engr.....	1206 Pacific Mutual Bldg., Los Angeles, Cal.	'02
Wiedenhoef, Edgar Paul, Instr., Civil Engrg., Michigan College of Mines.....	Houghton, Mich.	'27
Wiegand, F. W., Pet. Geol.....	2000 W. Summit Ave., San Antonio, Tex.	'22
Wiegand, Seel P.....	7669 Sheridan Rd., Chicago, Ill.	'27
†Wiel, Samuel C., Attorney-at-Law.....	628 Merchants Exchange Bldg., San Francisco, Cal.	'03
Wieland, Philipp J. H., Engr., Tech. Dir., Wieland-Werke A.G., Postfach 8, Ulm A. D., Germany.		'26
Wiggin, Albert E., Met. Engr., Gen'l Supt., Great Falls Reduction Dept., Anaconda Copper Min. Co., Great Falls, Mont.		'12
Wight, Arthur E., Min. Engr.....	Ray, Ariz.	'27
Wightman, A. M., Met. Engr., The Electric Materials Co.....	North East, Pa.	'27
Wigle, Allan Scott.....	200 Water St., Perth Amboy, N. J.	'26
Wigton, G. H., Met. Engr., Chief Consolidated Mining Co.....	Eureka, Utah.	'14
Wilbraham, A. G. B.....	Orchard Hotel, Portman St., London, W.1, England.	'99
Wilbur, Warren A., Northampton Iron Co.....	Bethlehem, Pa.	'92
Wilcox, E. R., Asst. Prof. of Gen'l Engrg., College of Engrg., University of Washington, Seattle, Wash.		'20
†Wilcox, Everett, Min. Engr., Foreign Dept., Bucyrus Co.....	S. Milwaukee, Wis.	'24
Wilcox, Floyd G., Pres. & Gen'l Mgr., West End Coal Co. & Price-Pancoast Coal Co., 1007 Mears Bldg., Scranton, Pa.		'27
Wilcox, Gordon Howard.....	Kyle, McDowell Co., W. Va.	'14
Wilde, Frank L., Geol.....	2 Park Lane West Apt., Mt. Vernon, N. Y.	'20
Wilder, Frank A., Cons. Geol., Beaver Board Co.....	North Holston, Va.	'17
Wilding, James, Met. & Min. Engr.....	Room 2424, 61 Broadway, New York, N. Y.	'96
†Wildman, Roy S., V.P., Ansonia Branch, The American Brass Co.....	Waterbury, Conn.	'27
Wiles, Gloyd M.....	Box 132, Thetford Mines, Que., Canada.	'23
Wiley, Walter H., Min. Engr.....	Palm Dr., Glendora, Cal.	'96
Wilfley, Elmer R., Pres. & Mgr., A. R. Wilfley & Sons, Inc., 516 Denham Bldg., Denver, Colo.		'28
Wilgus, Frank A., Jr., Chief Draftsman, Engrg. Dept., United Verde Copper Co., Clarkdale, Ariz.		'21
Wilhelm, Victor H., Chief Pet. Engr.....	Room 1005, 929 S. Broadway, Los Angeles, Cal.	'21
Wilhelm, William, Mgr., Ingersoll-Rand Co.....	Scranton, Pa.	'23
Wilke, William, Cons. Engr.....	86 Norwood Ave., Buffalo, N. Y.	'17
Wilke, William, Jr., Pres., Metals Refin. Co.....	Box 138, Hammond, Ind.	'18
Wilkins, Lle. H., Cons. Min. & Civ. Engr., The Oil Alliance, Ltd., 25 Ironmonger Lane, London, E.C.3, England.		'11
†Wilkins, William J., Gulf Pipe Line Co.....	Box 111, El Dorado, Kans.	'28
Wilkinson, A. D., Smelter Supt., Cananea Cons. Copper Co.....	Cananea, Son., Mexico.	'18
Wilkinson, E. W., Minerals Separation North American Corp., 220 Battery St., San Francisco, Cal.		'21
Wilkinson, William F., Min. Engr.....	Hurstbourne Priors, Whitechurch, Hants, England.	'88
Wilkinson, Willie Homer, Chief Chem., Messrs. E. & A. Smith & Co., Ltd., Cleckheaton, Yorkshire, England.		'29
Willard, James O., Civ. Engr.....	Woodlawn, Beaver Co., Pa.	'04
Willard, Leigh, V.P., Semet-Solvay Co.....	61 Broadway, New York, N. Y.	'12
†Willcox, Dudley, Sec. & Treas., Ajax Electrothermic Corp.....	Ajax Park, Trenton, N. J.	'21
Willcox, Frederick H., V.P., Freyn Engrg. Co.....	310 S. Michigan Ave., Chicago, Ill.	'27
Willcox, Jerome E., Stope Boss, Nevada Cons. Copper Co.....	Ruth, Nev.	'20
Willets, Robert H., Min. Engr.....	Roslyn, L. I., N. Y.	'18
†Willets, Stephen Taber, Agriculturist.....	Roslyn, L. I., N. Y.	'25

For explanation of symbols, see page 5.



Wiley, Howard, Asst. Supt., Charcas Unit, American Smelt. & Refin. Co.,	Charcas, S. L. P., Mexico.	'26
Wiley, Ogden G., Met.	489 Housatonic Ave., Stratford, Conn.	'20
Williams, Alpheus F., Gen'l Mgr., DeBeers Cons. Mines, Ltd.,	Kimberley, Cape Province, S. Africa.	'97
Williams, Arthur	Roslyn, L. I., N. Y.	'14
Williams, Arthur M., Colliery Supt., Powderly Colliery, Hudson Coal Co.	Mayfield, Pa.	'20
Williams, Berkeley, Pres., Williams Oil Co.	Box 1758, Richmond, Va.	'18
Williams, Charles E., Asst. Geol. & Leakage Engr.	308 Seneca St., Oil City, Pa.	'25
Williams, Charles Francis, Min. Engr., Dist. Min. Supervisor, Mineral Leasing Div.,	U. S. Geol. Survey, 407-408 Security Bldg., Miami, Okla.	'17
Williams, Clyde E., Battelle Memorial Institute	505 King Ave., Columbus, Ohio.	'26
Williams, Conway G., Met. Engr., Magna Plant, Utah Copper Co.	Magna, Utah.	'21
Williams, Edward G., V.P., J. G. White Engrg. Corp.,	43 Exchange Pl., New York, N. Y.	'97
Williams, Edward H., Jr.	Westerdale, Woodstock, Vt.	'76
Williams, Edward I., Min. Engr., Smelter Supt., Tennessee Copper Co.	Copperhill, Tenn.	'17
Williams, Edward R., Asst. to Pres., Vulcan Mold & Iron Co.	Latrobe, Pa.	'28
Williams, Emil F., Graduate Asst. in Geol. & Mineralogy, Pennsylvania State College,	School of Mines & Met., State College, Pa.	'27
Williams, George K., Designing Engr., Hudson Bay Min. & Smelt. Co.,	500 Royal Bank Bldg., Winnipeg, Man., Canada.	'17
Williams, George O.	1319 E. 8th St., Okmulgee, Okla.	'21
Williams, H. D., Pres., Pittsburgh Steel Co., Union Trust Bldg.	Pittsburgh, Pa.	'24
Williams, Harry M., Chem. & Met. Engr., Frigidaire Corp.	Dayton, Ohio.	'21
Williams, Henry J., Chem.	116 Coolidge Hill, Cambridge, Mass.	'87
Williams, Herbert L., Met. Engr., Mineral Point Zinc Co.	Depue, Ill.	'18
Williams, Howard Edward, Chief Draftsman, Calumet & Hecla Cons. Copper Co.,	Calumet, Mich.	'17
Williams, J. Miller, Mgr., American Rubber Producers, Inc.	Box 727, Salinas, Cal.	'06
Williams, J. P., Jr., Min. Engr., The Koppers Co.	800 Union Arcade Bldg., Pittsburgh, Pa.	'12
Williams, J. Ward, Engr., Mgr., Buchans Min. Co., Ltd.	Buchans, Newfoundland.	'19
Williams, John C., Geol.	221 Orchard Ave., Ridgway, Pa.	'19
Williams, John Charles, The Dorr Co.	Westport, Conn.	'26
Williams, John S.	1235 10th St., Douglas, Ariz.	'14
Williams, Kenneth	326 Tacoma Bldg., Tacoma, Wash.	'17
Williams, Laurens A. P., Engr., Route 106, Section 2, La Rocca Subway Construction Co.,	161st St. & River Ave., The Bronx, New York, N.Y.	'29
Williams, Leonard F., Asst. Engr., Lake Shore Mines, Ltd.	Kirkland Lake, Ont., Canada.	'26
Williams, Louis William, Mgr., The Union Drawn Steel Co.,	460 Washington St., New York, N. Y.	'18
Williams, Mahaffey Berton, Student, The Pennsylvania State College	State College, Pa.	'27
Williams, Maurice E., Asst. Mill Supt., Hollinger Cons. Gold Mines, Ltd.,	Timmins, Ont., Canada.	'17
Williams, Morris	1732 Commercial Trust Bldg., Philadelphia, Pa.	'91
Williams, Percy, Min. Engr., Pres. & Mgr., Silver Reef Mines	Casa Grande, Ariz.	'20
Williams, Percy A., Pet. Engr., Bolsa Chica Oil Corp.,	410 Roosevelt Bldg., Los Angeles, Cal.	'21
Williams, R. Massey, Shield Dev. Co., Ltd.	Tip Top Mine, Kashabowie, Ont., Canada.	'27
Williams, Ralph B., Cons. Min. Engr., Metal & Thermit Corp.,	Room 2202, 120 Broadway, New York, N. Y.	'05
Williams, Reginald V., V.P. & Gen'l Mgr., The Williams Gold Refin. Co., Inc.,	2978 Main St., Buffalo, N. Y.	'27
Williams, Robert S., Prof. of Physical Met., Mass. Inst. of Tech.	Cambridge, Mass.	'23
Williams, R. Y., Chief Engr., Weston Dodson & Co.	Pottsville, Pa.	'05
Williams, S. Herbert	Address Wanted	'95
Williams, Thomas M., Min. Engr.	Dover, N. J.	'17
Williams, W. A., Pres., Crown-Central Pet. Corp.	Houston, Tex.	'03
Williams, W. H.	Suite 1923, 120 Broadway, New York, N. Y.	'15
Williams, Wayne W., Met. Engr., Anglo-Chilean Cons. Nitrate Corp.,	Casilla 17, Tocopilla, Chile.	'24
Williamson, Earl	Cerro de Pasco, Peru.	'23
Williamson, F. O., Min. Mach.	910 Hobart Bldg., San Francisco, Cal.	'10
Williamson, H. D.	83 Hayes Rd., Bromley, Kent, England.	'03
Williamson, Harry M., Pres. & Gen'l Mgr., Lucky Star Mines, Inc.,	413 Tabor Bldg., Denver, Colo.	'20
Williamson, Stuart W., Chief Engr., Portsmouth By-Product Coke Co., Edgarton, W. Va.	Stanford University, Cal.	'25
Willis, Bailey, Cons. Geol. & Engr., Stanford Univ.	2526 Lincoln St., Bellingham, Wash.	'24
Willis, Carl S.		
Willis, Charles F., Editor & Publisher, <i>The Mining Journal</i> ,	Home Builders Bldg., Phoenix, Ariz.	'10

# 160 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

†Willis, Robin, Geol., Nordon Corp.....	Box 1405, Midland, Tex.	'27
Willis, Sanford L., Met. Engr.....	72 W. 6th St., Corning, N. Y.	'20
†Williston, Samuel H., Geol., Sun Oil Co.....	American Exchange Bank Bldg., Dallas, Tex.	'21
Willmarth, O. Barlow, Gen'l Mine Management, Kelso National Min. Corp. & Others,	Montrose, Colo.	'24
Willrich, E. G.....	Address Wanted.	'22
Wills, William A., Concentrator, Vanadium Corp. of America.....	Bridgeville, Pa.	'24
Willson, Edwin L., Service Engr., Lehigh Coal & Navigation Co.,	1421 Chestnut St., Philadelphia, Pa.	'25
†Willson, Fay G., Min. Engr.....	Tooele, Utah.	'23
Willson, Harold E., Chief Engr., H. E. Willson Engrg. Co.....	Thurmond, W. Va.	'16
Wilmarth, J. B.....	Selection Trust, London, England.	'21
Wilmot, George W., Pres. & Gen'l Mgr., Wilmot Engrg. Co.,	Market Bank Bldg., Hazleton, Pa.	'24
Wilputte, Louis, Pres. & Gen'l Mgr., Wilputte Coke Oven Corp.,	400 Madison Ave., New York, N. Y.	'19
Wilson, Alfred W. G., Engr., Chief Engr., Mineral Resources Div., Mines Branch, Dept. of Mines, Sussex St., Ottawa, Ont., Canada.		'06
Wilson, Anthony, Min. Engr., Threlkeld Lead Mines & Weardale Lead Co., Ltd.,	Thornthwaite, Keswick, Cumberland, England.	'19
Wilson, Charles H., Pres. & Gen'l Mgr., Wilson-Maeulen Co., Inc.,	383 Concord Ave., New York, N. Y.	'28
Wilson, Clifford H., Pet. Engr., Venezuela Gulf Oil Co., Apt. 234, Maracaibo, Venezuela.		'27
Wilson, Clyde H., Field Engr., The Radiore Co., 9035 Venice Blvd., Los Angeles, Cal.		'28
Wilson, Curtis L., Prof. of Met., Univ. of Montana, School of Mines.....	Butte, Mont.	'20
Wilson, Dudley M., Gen'l Contractor, Wilson & Seward, Gen'l Contractors,	Box 84, Brady, Tex.	'20
Wilson, E. C., Pres., Wilson Oil Tools Corp.; Wilson & Willard Mfg. Co.,	2301 E. Vernon Ave., Los Angeles, Cal.	'15
Wilson, E. T., Chairman of Board, Continental Oil Co.,	1020 Continental Oil Bldg., Denver, Colo.	'16
Wilson, Elwood J., Mining, Cons. Engr.....	350 Madison Ave., New York, N. Y.	'94
Wilson, Evan F., Research Engr., Jefferson Union Co.....	Lockport, N. Y.	'26
Wilson, George B., Min. Engr., Patent Attorney, 2301 E. Vernon Ave., Los Angeles, Cal.		'99
Wilson, George Bennett.....	921 S. Ridgewood Ave., Daytona Beach, Fla.	'07
Wilson, George H., Min. Engr., West End Coal Co. & Price-Pancoat Coal Co.,	1007 Mears Bldg., Scranton, Pa.	'28
Wilson, Gordon, Met. Engr.....	3942 Alameda Dr., San Diego, Cal.	'02
Wilson, Harold D., Met. Asst., American Rolling Mill Co., Met. Control Lab.,	Middletown, Ohio.	'28
Wilson, Harry.....	81 Queen St., Melbourne, Vic., Australia.	'93
†Wilson, John H., Asst. Prof. of Geophysics, Colorado School of Mines, Golden, Colo.		'22
Wilson, John Weldon, Supt., West End Chem. Co.....	Las Vegas, Nev.	'27
†Wilson, Joseph M., Geol., Simms Oil Co.....	10th Floor, Magnolia Bldg., Dallas, Tex.	'20
Wilson, Malcolm E., Lion Oil Co.....	El Dorado, Ark.	'17
Wilson, Philip D., Min. Engr., Engr. of Mines, O'Okiep, Namaqualand, S. Africa.		'16
Wilson, R. W.....	Box 995, Great Falls, Mont.	'20
Wilson, Ridgeway Robinson, Min. Engr. & Mine Operator, Mgr., W. R. Wilson & Sons,	504 Pacific Bldg., Vancouver, B. C., Canada;	'17
Wilson, Robert, Min. Engr., Rio Tinto Co., Ltd.....	Rio Tinto, Huelva, Spain.	'21
**Wilson, W. G., Arkansas Natural Gas Co.....	Shreveport, La.	'29
Wilson, Walter B., Chief Geol., Gypsy Oil Co.....	918 1st National Bank Bldg., Tulsa, Okla.	'20
Wilson, William A., Min. Engr.....	319 Dooly Block, Salt Lake City, Utah.	'83
Wilten, H. M., Met., Central Alloy Steel Corp.....	South Div., Canton, Ohio.	'20
Wiltsee, E. A., Engr. of Mines.....	Room 1002, 51 Maiden Lane, New York, N. Y.	'86
Wimmler, Norman L., Min. Engr.....	1734 N. Van Ness Ave., Los Angeles, Cal.	'18
Winchell, Alexander N., Min. Engr., Geol., University of Wisconsin.....	Madison, Wis.	'01
Wingard, Jaspas I., Min. Engr., Alabama By-Product Corp.....	Flat Creek, Ala.	'25
†Winham, Harold Frank, Gas Production Engr., Caribbean Pet. Co.,	Maracaibo, Venezuela.	'27
†Winser, H. E., The Torpedo Mines.....	Idaho Springs, Colo.	'25
Winslow, Arthur, Min. Engr., Pres. & Gen'l Mgr., Liberty Bell Gold Mining Co.,	131 State St., Boston, Mass.	'81
Winslow, Francis, Min. Engr., Chamber of Commerce.....	Washington, D. C.	'14
Winters, Robert W., Sullivan Machinery Co.....	619 N. 10th St., Birmingham, Ala.	'26
Winther, Arno S., Min. Engr., Gen'l Mgr., Anna Beaver Mines Co., Box 427, Cardin, Okla.		'14
†Wise, Alfred L., Min. Engr.....	190 William St., New York, N. Y.	'13
Wise, Edmund M., Met., The International Nickel Co., Inc.....	Bayonne, N. J.	'29
Wise, Sidney L., Min. Engr.....	Room 1613, 285 Madison Ave., New York, N. Y.	'14
Wiseman, Philip.....	1206 Pacific Mutual Bldg., Los Angeles, Cal.	'98

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## MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES 161

Wiser, Oba, Cons. Met., Howe Sound Co., c/o Western Purchasing Co.,	
	Mills Bldg., El Paso, Tex. '14
Wishon, W. W.....	244 Douglas Bldg., 3rd & Spring Sts., Los Angeles, Cal. '82
Wisner, Clarence B., Pres., The Carbocite Co., 814 First National Bank Bldg., Canton, Ohio.	'27
Wisner, Edward Hollister, Chief Geol., Cia. de Real del Monte y Pachuca,	
	Apt. 3, Pachuca, Hgo., Mexico. '18
Witcomb, Richard L., Chile Exploration Co.....	Chuquicamata, Chile. '20
Witherell, Charles S., Met. Engr.....	150 Nassau St., New York, N. Y. '10
Withrow, D. G., Withrow-Commodore Lease, Inc.....	Creeds, Colo. '27
Witmer, Luther F., Assoc. Prof. of Met., Lafayette College.....	Easton, Pa. '24
Witt, A. H., Min. Engr.....	1409 American Trust Bldg., Birmingham, Ala. '21
Witt, Herbert N., Cons. Geol.....	523 Sharon Bldg., San Francisco, Cal. '14
Wittenberg, John Conrad, Civ. & Min. Engr.....	Pineville, W. Va. '20
Wittenoom, Charles H.....	Muralgarra Station, via Yalgoo, W. Australia. '03
Woakes, Ernest R., Cons. Min. Engr., with Messrs. John Taylor & Sons,	
	6 Queen St. Pl., London, E. C., England. '89
Woessner, Claude, Engr., Venezuela Gulf Oil Co.....	21 State St., New York, N. Y. '29
Wohlrab, Aloys H., Min. Engr., Supt., Isle Royale Copper Co.....	Houghton, Mich. '13
Wohllwill, Heinrich, Dir., Norddeutsche Affinerie, Alstrufer 6, Hamburg 36, Germany.	'27
Wohrman, Carl R. E., Société de Matériel Acoustique,	
	1, Boulevard Haussmann, Paris, France. '25
Wolf, Albert G., Texas Gulf Sulphur Co.,	
	1009 Second National Bank Bldg., Houston, Tex. '09
Wolf, Fred L., Chem. Engr., Chief Engr. & Tech. Supt., The Ohio Brass Co.,	
	Mansfield, Ohio. '18
Wolf, Harry J., Min. Engr.....	42 Broadway, New York, N. Y. '03
Wolf, Martin Y.....	Box 896, La Mesa, Cal. '11
Wolfard, Merl Ruskin, Engr., charge, Research Lab., Hopewell Bros.,	
	19 Brook St., Watertown, Mass. '14
Wolfe, George.....	1405 Parkway, Beverly Hills, Cal. '23
Wolfe, U. G.....	Route 1, Box 215 F, Chula Vista, Cal. '28
Wolfe, W. Lloyd, Supt., Delaware River Steel Co.....	Chester, Pa. '13
†Wolfe, William, Engr., City of New York.....	Borough Hall, Bronx, New York. '25
Woltersperger, J. J., Management & Engrg. Corp.,	
	Room 706, Laclede Gas Bldg., 1017 Olive St., St. Louis, Mo. '20
†Wolff, George F., Comptroller, The New Jersey Zinc Co., 160 Front St., New York, N. Y.	'19
Wolffe, Sam. M., Gen'l Agent, charge of Lands & Leases, New River & Pocahontas Cons.	
	Coal Co. & Kentland Coal & Coke Co., 1006 Ashland National Bank Bldg., Ashland, Ky. '26
Wolffington, Arlie A., Mechanical & Structural Draftsman.....	Copperhill, Tenn. '29
Wolffe, Conrad.....	1201 Northern Life Tower, Seattle, Wash. '28
Wolfin, Hugh M.....	Box 1434, Route 1, Tujunga, Cal. '10
Wolvin, Augustus B., Pres., Wolvin Lines, Cooperative Enterprise of South Mexico,	
	Avenida Madero, 2, Mexico City, D. F., Mexico. '13
Woo, Yang Tsang.....	32, Rue Sabouraud, French Concession, Tientsin, N. China. '00
Wood, A. E., Head, Chemistry Dept., Mississippi College.....	Clinton, Miss. '27
Wood, Alexander Hamilton.....	Box 672, Johnson City, Tenn. '23
Wood, Fletcher, San Luis Min. Co.....	Tayoltita, Dgo., Mexico, via Estación Dimas. '15
Wood, Fred E., Pet. Engr., The Midwest Refin. Co.....	Box 1075 Casper, Wyo. '26
Wood, Frederick B., Mech. & Met. Engr., Baltimore Tube Co., Inc.....	Baltimore, Md. '20
Wood, Frederick W., Cons. Engr.....	2429 Keyworth Ave., Baltimore, Md. '12
Wood, George Reid, Lehigh Valley Coal Co.....	Hazleton, Pa. '15
Wood, Henry E., Min.....	1001 Pine St., San Francisco, Cal. '19
**Wood, Lewis Clarke, Chemical Engr. & Met., Andes Copper Min. Co., Potrerillos, Chile.	'29
Wood, Richard G., Steel Mfr., Alan Wood Iron & Steel Co.,	
	Widener Bldg., Philadelphia, Pa. '11
Wood, Robert F., Irvington Smelt. & Refin. Wks.....	Irvington, N. J. '18
Wood, Roy Udell.....	524 Waverly Ave., Brooklyn, N. Y. '17
Wood, Samuel E., Min. Engr., S. E. Wood Engineering Co., Box 793, Gallup, N. M.	'20
Wood, Thomas D., Retired Iron Manufacturer, 1900 S. Rittenhouse Sq., Philadelphia, Pa.	'79
†Wood, Thomas J., Met., Research Lab., International Nickel Co.....	Bayonne, N. J. '28
Wood, Walter, Iron Mfr.....	400 Chestnut St., Philadelphia, Pa. '85
†Wood, William Taylor, Engrg. Dept., E. I. du Pont de Nemours & Co.,	
	Old Hickory, Tenn. '23
Woodbridge, Dwight E., Cons. Min. Engr., Directing Engr., Fremont Grant, Inc.,	
	Mt. Bullion, Cal. '06
Woodbridge, T. R., Pres., Liberty Groves Operating Corp.....	Upland, Cal. '87
Woodbury, Clifford A., Dir., Eastern Lab., DuPont Co.....	Box 424, Chester, Pa. '29
Woodhouse, C. C., Jr., Min. Engr., & Met.....	365 Williams Ave., Portland, Ore. '13
Woods, Clarence.....	Instructed to hold everything. '07
Woods, Clarence Lee, Inca Min. & Development Co., Santo Domingo, via Tirapata, Peru.	'27
Woods, Hubert O., American Smelt. & Refin. Co.....	Hayden, Ariz. '27



# 162 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

†Woods, Luther E., Pres., Central Pocahontas Coal Co. & Crystal Block Coal & Coke Co.,	Welch, W. Va.	'21
†Woods, Thomas S., Treasurer, Bingham Mines Co.....	60 Congress St., Boston, Mass.	'20
Woods, William H., Gulf Oil Corp., Research Lab., Drawer C.....	Houston, Tex.	'28
Woodul, J. R., Gen'l Mgr., Mexican Smelt. Dept., American Smelt. & Refin. Co.,	Avenida Juarez 83, Mexico City, D. F., Mexico.	'18
Woodward, Allen H., Gen'l Supt., Woodward Iron Co.....	Woodward, Jefferson Co., Ala.	'00
Woodward, Frank A., Gen'l Mgr., Iron Cap Copper Co.....	Box 310, Globe, Ariz.	'16
Woodward, Herbert P., Prof. of Geol., New Jersey Law School.....	Newark, N. J.	'29
Woodworth, R. B., Civ. Engr.....	Burlington, Mineral Co., W. Va.	'10
Woodworth, Selim E., Met. Engr., Hamilton Beauchamp & Woodworth,	564 Market St., San Francisco, Cal.	'27
Woody, Guy V., Koppers-Rheolaveur Co.....	1150 Koppers Bldg., Pittsburgh, Pa.	'27
Woolf, J. A., Asst. Met., U. S. Bureau of Mines.....	Reno, Nev.	'24
Woolf, Wallace G., Supt., Sullivan Min. Co., Electrolytic Zinc Plant.....	Kellogg, Idaho.	'15
†Woolley, I. H., Gen'l Supt., Lower Vein Coal Co.....	Terre Haute, Ind.	'20
Woolmer, H. C. P.....	Cannon St. House, 110 Cannon St., London, E.C.4, England.	'98
Woolridge, Bert P., Acct., Hecla Min. Co.....	Wallace, Idaho.	'23
Woolsey, W. J., Min. Engr.....	2018 Clement St., San Francisco, Cal.	'20
Wootton, Thomas Peltier, Statistician, New Mexico Bureau of Mines, Socorro, N. M.		'28
Worden, Beverly L., Pres., Cutler Hammer Mfg. Co., 50 Church St., New York, N. Y.		'25
Work, Lincoln T., Instr., Chem. Engrg., Columbia Univ.....	New York, N. Y.	'26
Wormser, Felix Edgar, Sec. & Treas., Lead Industries Association,	420 Lexington Ave., New York, N. Y.	'16
Worth, John G., Min. Engr.....	9 E. 59th St., New York, N. Y.	'27
Worthington, Arthur Whittemore, Asst. to Gen'l Mgr., Pittsburgh Limestone Co.,	216 Carnegie Bldg., Pittsburgh, Pa.	'28
†Worthington, G. C., Geol., Anaconda Copper Min. Co., Silver Bow Club, Butte, Mont.		'21
Wotherspoon, W. L., Cons. Engr., The International Nickel Co.,	67 Wall St., New York, N. Y.	'16
Wotring, Robert W., Engrg. Corp., United States Coal & Coke Co.....	Gary, W. Va.	'26
Wraith, Charles R., Met., Anaconda Copper Min. Co., Anaconda Red. Wks.,	Anaconda, Mont.	'26
Wraith, William, Executive, Inspiration Cons. Copper Co., & Andes Copper Min. Co.,	Cunard Bldg., 18th Floor, 25 Broadway, New York, N. Y.	'03
Wrather, William Embry, Cons. Geol.....	4300 Overhill Dr., Dallas, Tex.	'15
Wray, D. C., Gen'l Supt., American Zinc & Chemical Co.....	Box 25, Langeloth, Pa.	'16
Wren, Andrew Addison, Min. Engr., Radiore Co. of Canada, Ltd.,	Devonshire Hotel, Vancouver, B. C., Canada.	'15
Wright, Charles W., Chief Engr., Min. Div., Bureau of Mines,	Room 315, Winder Bldg., 17th & F Sts. N. W., Washington, D. C.	'05
Wright, Clarence A., Min. & Met. Engr., Wks. Mgr., Graphite Wks., American	Cyanamid Co., Box 127, Linden, N. J.	'12
Wright, E. Chester, Met., National Tube Co.....	Ellwood City, Pa.	'24
Wright, Edwin, Min. Engr., Spring Canyon Coal Co.....	Spring Canyon, Utah.	'20
Wright, Fay Linton, V.P. & Chief Geol., Dir. & Mgr., Land Dept., Superior Oil Co.,	1100 Second National Bank Bldg., Los Angeles, Cal.	'09
Wright, Frederic A., Pres., Dewey Mines Co.....	Gazelle, Siskiyou Co., Cal.	'29
Wright, Frederic E., Geol., Geophysical Laboratory.....	Washington, D. C.	'04
Wright, H. H., Pet. Production Engr., Gypsy Oil Co.....	Box 2044, Tulsa, Okla.	'29
Wright, Harry F., Chief Geol., Savoy Oil Co., 1022 Mid-Continent Bldg., Tulsa, Okla.		'15
Wright, Ira L., Min. Engr., General Practice, Gen'l Mgr., Black Hawk Cons. Mines Co.,	Silver City, N. M.	'15
Wright, K. M., Wks. Mgr., United States Gypsum Co.....	Genoa, Ohio.	'19
Wright, Lawrence Boynton, Chief Geol., Homestake Min. Co.....	Lead, S. D.	'29
Wright, Lewis T.....	27 Rembridge Crescent, London, W.11, England.	'97
†Wright, Livingston, Min. & Met. Engr.....	239 Presidents Lane, Quincy, Mass.	'21
Wright, Louis A., Min. Engr., Wilkens & Devereux,	Stone House, Bishopsgate, London, E.C.2, England.	'04
Wright, Percy E., Cons. Mech. Engr., The Percy E. Wright Engrg. Co.,	811 Seaboard Bldg., Seattle, Wash.	'14
Wright, Thomas A., Tech. Dir., Lucius Pitkin, Inc.....	47 Fulton St., New York, N. Y.	'23
Wright, William J., Provincial Geol., Dept. of Lands and Mines, Fredericton, N. B., Canada.		'22
Wright, William Ryer, Min. Engr., Chicago Mgr., Ford, Bacon & Davis, Inc.,	Room 1872, 208 S. La Salle St., Chicago, Ill.	'17
Wroth, James S., Min. Engr., U. S. Bureau of Mines.....	Washington, D. C.	'15
Wuensch, C. Erb, Min. Engr. & Geol.....	100 Broadway, New York, N. Y.	'20
†Wund, Sarah Owen (Miss), Student in Achitecture, Cambridge School,	53 Church St., Cambridge, Mass.	'28
Wyant, Frank A.....	5520 Baum Blvd., Pittsburgh, Pa.	'18
Wyatt, James S.....	955 Sausalito Blvd., Sausalito, Cal.	'05

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Wydler-Hollis, F. J., Min. Engr., Selection Trust, Selection Trust Bldgs., Mason's Ave., Coleman St., London, E.C.2, England.	'23
Wyer, Samuel S., Cons. Engr.....1116 Beggs Bldg., Columbus, Ohio.	'05
Wyer, Joseph A., Research Chem. & Chem. Engr., Trojan Powder Co., Allentown, Pa.	'18
Wyly, Arthur J., Met. Engr., Chief of Red. Works, Lebong Donok Gold Mine, Lebong Donok, Moeara Aman, Sumatra, N. E. I.	'15
Wyman, Thomas Noel, Gen'l Supt., Embree Iron Co.....Embreeville, Tenn.	'19
Wyner, Alexander S., Chemist & Assayer, New Cornelia Copper Co., Box 397, Ajo, Ariz.	'22
Wynne, A. H. P.....c/o Calabacillas Mining Co., via San Jose de Garcia, Sin., Mex.	'95
†Wynne, Victor Ainslie, Topographer, Republic of Haiti, c/o Engr. of Haiti, Port-au-Prince, Haiti.	'19
Wysor, D. C., General Chem. Co.....40 Rector St., New York, N. Y.	'16
Wysor, Henry, Met. Engr., Bethlehem Steel Co.....Bethlehem, Pa.	'29
Wysor, R. J., Asst. Gen'l Mgr., Jones & Laughlin Steel Corp., Third Ave. & Ross St., Pittsburgh, Pa.	'15
Yabe, Chuji, Min. Engr., Sumitomo Besshi Copper Mine.....Niigun, Ehimeken, Japan.	'17
Yamada, Fukunosuke, Dir., Furukawa & Co., Marunouchi, Kojimachi-ku, Tokyo, Japan.	'17
Yamada, Gaichi, Dept. of Min. & Met., Kyoto Imperial University.....Kyoto, Japan.	'21
Yamamoto, Nobuo, Gen'l Mgr., Sumitomo Wakamatsu Coal Dept., Wakamatsu, Fukuokaken, Japan.	'19
Yap, Chu Phay.....45 Grove St., New York, N. Y.	'25
Yardley, J. L. McK., Engrg. Mgr., Central Dist., Westinghouse Electric & Mfg. Co., 18th Floor, Grant Bldg., Pittsburgh, Pa.	'18
†Yarotsky, Michael F., Asst. Supt., Franklin Open Hearth, Bethlehem Steel Co., Johnstown, Pa.	'20
Yassukevich, Stanislas M., Supt. of Concentration, Sverdlovsk, Urol-Zvet-Met., R-Luxemburg, Str. N 3, U.S.S.R.	'26
Yasukawa, S.....Mitsubishi Arakawamine, Arakawa, Akitaken, Japan.	'17
Yasunaga, Gosanji, Mgr., Mitsui Kawakami Colliery, Mitsui Mining Co., Ltd., Kawakami, Karafto, Japan.	'22
Yates, Bruce Clinton, Min. Engr., Gen'l Mgr., Homestake Min. Co.....Box 875, Lead, S. D.	'03
†Yates, John L., Asst. Prof. of Mathematics, Box 153, Faculty Exchange, Washington University, St. Louis, Mo.	'23
Yatsevitch, Michael G.....Watertown Arsenal, Watertown, Mass.	'14
Yeager, Howard M., Min. Engr.....Pineville, Ky.	'12
Yeandle, William H., Continental Mexican Rubber Co., Apt. 176, Torreon, Coah., Mexico.	'04
Yeatman, Pope, Cons. Min. Engr., Yeatman & Berry, Room 1604, 165 Broadway, New York, N. Y.	'83
Yensen, Trygve D., Research Engr., Westinghouse Research Lab., Ardmore Blvd., East Pittsburgh, Pa.	'20
†Yerkes, S. L., V.P., Grider Coal Sales Agency, 1414 American Trust Bldg., Birmingham, Ala.	'20
†Yetter, Edward J., Pres. & Gen'l Mgr., The Western Elaterite Roofing Co., 841 Equitable Bldg., Denver, Colo.	'28
†Yewell, P. R.....509 Rust Bldg., San Angelo, Tex.	'17
Yokel, Francis C., Chem. Engr., Stauffer Chem. Co.....San Francisco, Cal.	'29
Yokobori, Jisaburo, Cons. Engr.....10 Nishikatamachi, Hongo, Tokyo, Japan.	'27
Yonekra, Kiyotsugu.....249 Osakimachi, Yebaragun, Tokyo, Japan.	'20
Yonezawa, Jitaro, Min. Engr., The Akita Min. College.....Akita, Japan.	'22
York, D. A., Sullivan Concentrator.....Chapman Camp, B. C., Canada.	'24
York, Herbert W., Cons. Engr., American Smelt. & Refin. Co., 120 Broadway, New York, N. Y.	'21
Yoshizawa, Kentaro, Mgr., Korean Branch, Mitsui Min. Co., Ltd.....Seoul, Chosen (Korea).	'22
Young, A. B., Met., Asst. Mgr., International Smelt. Co., 818 Kearns Bldg., Salt Lake City, Utah.	'15
Young, C. Louis, Engr., Conveyor Sales Co., Inc. 299 Broadway, Room 915, New York, N. Y.	'20
Young, Clinton M., Prof. of Min. Engrg., Univ. of Kansas.....Lawrence, Kans.	'09
Young, Dana, Instructor of Engrg. Mechanics, Sheffield Scientific School, 51 Prospect St., New Haven, Conn.	'26
Young, Donald McK., Met. Engr., Royal Development Co. of Montana.....Leavenworth, Wash.	'27
Young, Earl B., Cons. Geol. & Min. Engr., W. F. Snyder & Sons Co., 218 Felt Bldg., Salt Lake City, Utah.	'16
Young, Edward L., Min. Engr., Cia. Real del Monte y Pachuca.....Pachuca, Hgo., Mexico.	'18
Young, Edward R., Met. Engr., Climax Molybdenum Co.....2807 Book Tower, Detroit, Mich.	'20
Young, Frank A., Chief Engr., St. Louis Rocky Mountain & Pacific Co.....Raton, N. M.	'27
Young, George C., Demonstrator of Cardox, Safety Min. Co.....Chicago, Ill.	'28
Young, George J., Cons. Min. & Met., Assoc. Editor, <i>Engrg. &amp; Min. Journal</i> , 883 Mission St., San Francisco, Cal.	'00

# 164 MEMBERS, JUNIOR MEMBERS, ASSOCIATES AND JUNIOR ASSOCIATES

Young, George S., Goodwin & Young.....	829 Wawona Ave., Oakland, Cal.	'20
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Young, Harold M., Colliery Engrg., Baltimore Colliery, Hudson Coal Co.....	Parsons, Pa.	'23
Young, Hayes W., Research Engr., Field Div., Midwest Refn. Co., Midwest Gas Plant, Midwest, Natrona Co., Wyo.		'12
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Young, Horace G., Mgr., Howey Gold Mines, Ltd.....	Red Lake, via Hudson, Ont., Canada.	'14
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Young, James S.....	Apt. 435, Lima, Peru.	'95
Young, L. W., Jr., Pres., South Pennsylvania Oil Co.....	Box 1255, Pittsburgh, Pa.	'20
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Young, Lewis E., V.P., Pittsburgh Coal Co.....	Box 64, Pittsburgh, Pa.	'01
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†Young, Russell S., Met., O. K. Tool Co.....	Shelton, Conn.	'21
Young, William G., Geol. & Engr.....	2756 W. 9th St., Los Angeles, Cal.	'18
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Youtsey, Floyd Stephens, Cons. Engr., St. Louis Smelt. & Refn. Co.....	Collinsville, Ill.	'19
Yundt, Evan R., Blast Furnace Apprentice, South Wks., Illinois Steel Co., South Chicago, Ill.		'27
Yundt, Leonard D., Mill Supt., Yellow Pine Min. Co.....	Goodsprings, Nev.	'18
Yung, M. B., Min. Engr., Mgr., Asia Coal & Briquetting Co., Ltd., China Bldg., Hong Kong, China.		'03
Yungbluth, Andrew J., Purchasing Agent, The Cleveland-Cliffs Iron Co....	Ishpeming, Mich.	'12
Zaba, Joseph, Pet. Engr., Rio Bravo Oil Co.....	Houston, Tex.	'25
Zale, Joseph J., Min. Engr., Student, Wisconsin School of Mines.....	Milwaukee, Wis.	'26
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Zante, Roy Van.....	Tooele, Utah.	'29
Zapfe, Edward O., Student, Lawrence College.....	Appleton, Wis.	'27
Zapfe, Carl, Mgr., Iron Ore Properties, Northern Pacific Railway Co.....	Brainerd, Minn.	'11
Zaruba, J. A., Geol. Student, McKay School of Mines, University of Nevada.....	Reno, Nev.	'29
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Zavoico, Basil B., Cons., Geol. & Pet. Engr.....	501 Philtower Bldg., Tulsa, Okla.	'23
Zehm, Robert C., Supt., Gladding, McBean & Co., Alberhill Plant.....	Aberhill, Cal.	'21
Zeidler, Rodolphe F., Min. Engr.....	Koidulastr. 3a, Reval-Estie U.S.S.R.	'19
Zeigler, George Edward, Patino Mines & Enterprises Cons., Inc.....	Llallagua, Bolivia.	'24
*Zeigler, Paul P., Met., Andes Copper Min. Co.....	Potrerillos, Chile.	'29
Zeigler, W. L., Min. & Met. Engr., Mill Supt., Hecla Min. Co.....	Wallace, Idaho.	'15
Zeller, George A., 2nd Lieut., Ordnance Dept., U. S. Army.....	Manila, P. I.	'23
Zeller, Howard P., V.P. & Gen'l Mgr., The Donner-Hanna Coke Corp., Box 197, Buffalo, N. Y.		'08
Zentner, Arthur, Consulting Met. Engr.....	74 New Montgomery St., San Francisco, Cal.	'13
Zerbey, Arthur L., Pres., Fuel Service Co., Inc.....	17 Battery Pl., New York, N. Y.	'23
Zerbey, Frederic E., Gen'l Mgr., The Kingston Coal Co.....	Kingston, Pa.	'92
Zickrick, Lyall, Met., General Electric Co., Research Lab.....	Schenectady, N. Y.	'22
†Ziege, M. E.....	Address Wanted	'21
†Ziegler, Nicholas A., Research Engr., Research Dept., Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.		'23
Zimmermann, Alfred G., Lieut. Comdr., U. S. N., Bureau of Ordnance, Navy Dept., Washington, D. C.		'21
†Zimmer, Siegfried H., Asst. Engr., Albany Port District Commission, 74 Chapel St., Albany, N. Y.		'25
Zimmerman, A. A., Chem. Assayer, Supt., American Smelt. & Refn. Co., East Helena, Mont.		'96
Zimmerman, A. Hartley, Field Engr., Lucky Tiger Combination Gold Mines, Can. Expt. Dept., Box 287, Cobalt, Ont., Canada		'24
†Zimmerman, J. R.....	4116 So. Figueroa St., Los Angeles, Cal.	'22
Zimmerman, James Z., Pet. Geol.....	Delmont, Westmoreland Co., Pa.	'20
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Zimmerschied, K. W., Met.....	250 West 57th St., New York, N. Y.	'13
†Zodac, Peter, Min. Engr.....	157 Wells St., Peekskill, N. Y.	'20
Zoffman, George F.....	1811 Esperson Bldg., Houston, Tex.	'20
Zollinger, Fred L., Colliery Supt., Clinton Colliery, Hudson Coal Co.....	Vandling, Pa.	'20

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Zornig, Hermann H., Major, Ordnance Dept., U. S. Army, Embassy of the U. S., Office of Military Attache, Berlin, Germany	'21
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Zur Horst, Clifford G., Fellowship Asst., Mellon Institute.....Pittsburgh, Pa.	'24
Zuschlag, Theodor, Research Engr., Swedish-American Prospecting Corp., 26 Beaver St., New York, N. Y.	'27
Zwicky, William E., Pres. & Managing Dir., Krao Mines, Ltd.....Coeur d'Alene, Idaho.	'05
Zyderveld, P. H., Mill Supt., Compania Minera "Porvenir de Huanuni" Casilla 431, Oruro, Bolivia.	'28

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Apter, Robert F., Student, McGill Univ.....Montreal, Que., Canada.	'30
Bailey, Donald G.....798½ Kensington Rd., Los Angeles, Cal.	'29
Baker, Kenneth B., Met., Aluminum Co. of America.....Pittsburgh, Pa.	'29
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Bates, Walter, Student, Univ. of Utah, School of Mines.....Salt Lake City, Utah.	'30
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Boswell, John C., Stripping Asst., Fairbanks Exploration Co.....Fairbanks, Alaska.	'29
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Clark, Martin Lester, Student, Missouri School of Mines.....Rolla, Mo.	'29
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Conder, Henry S., Student, Pet. Engrg., College of Min., Univ. of California, Berkeley, Cal.	'30
Cotton, John Francis, Metallographist, Steelton Plant, Bethlehem Steel Corp., Steelton, Pa.	'29
Dahlgren, Elmer George, Student, Univ. of Wisconsin, Tripp Hall, Madison, Wis.	'29
Daly, James L., Student, Colorado School of Mines.....Golden, Colo.	'29
Dashti, Mirza Abdullah Khan, Graduate Student, Columbia School of Mines, Engrg. & Chemistry, New York, N. Y.	'29
DeHuff, Gilbert L., Jr., Student, Lehigh Univ.....Bethlehem, Pa.	'29
de Romana, Enrique P., Jr. Engr.....Casilla 22, Arequipa, Peru.	'29
Dresbach, Charles Howard, Geol., Gulf Production Co.....Box 1428, Amarillo, Tex.	'29
Evans, Howard G., Student, Michigan College of Min. & Tech.....Houghton, Mich.	'30
Fassler, Glen Emerson.....Rodman, Inspiration, Ariz.	'29
Feight, Charles Donald, Foreman, Clairton By-Product Coke Wks., Carnegie Steel Co., 319 5th St., Wilson, Pa.	'29
Floe, Carl F., Student, State College of Washington.....Pullman, Wash.	'30
Fuentes, Vicente, Student, Pet. Engrg., Univ. of Oklahoma, School of Mines, Norman, Okla.	'30
Fuhrman, Carl F., Student, New Mexico School of Mines.....Socorro, N. M.	'29
Goergen, Gerald G., Cerro de Pasco Copper Corp.....Casapalca, Peru.	'29
Grove, Hubert A., Training Course, U. S. Aluminum Co.....New Kensington, Pa.	'29
Gustetter, Robert E.....1010 N. Cherry Ave., Tucson, Ariz.	'29
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Halfast, Edgar.....710 E. Okmulgee Ave., Muskogee, Okla.	'29
Hall, Robert Lee.....121 58th St., Niagara Falls, N. Y.	'29
Hanson, Rolf H., Student, Colorado School of Mines.....Golden, Colo.	'29
Hillyer, Shaler G., Student, New Mexico School of Mines.....Socorro, N. M.	'29
Hoertel, Frederick W., Met., R. W. Hunt Co., Engrs.....St. Louis, Mo.	'29
Holtz, Henry G., Student, Ohio State Univ.....Columbus, Ohio.	'30
Hon, Richard J.....Box 721, Miami, Ariz.	'29
Huffman, James O'Neil, Student, College of Min., Univ. of California.....Berkeley, Cal.	'30

Ireland, H. Andrew, Student, Dept. of Geol., Univ. of Oklahoma.....	Norman, Okla.	'29
Ittner, Frank Edward, Student.....	129 W. 38th St. S., Oklahoma City, Okla.	'29
Iverson, Henry G., Student, Research Dept. in Min. & Met. Engrg., Univ. of Utah, Rapid City, S. D.		'29
Jantzen, Herman Regahl, Student, Univ. of California.....	Berkeley, Cal.	'30
Jenkins, William J., Student, Ohio State University.....	Columbus, Ohio.	'29
Jensen, Ralph C., Student, Colorado School of Mines.....	S. A. E. House, Golden, Colo.	'29
Johnson, M. Melville, Geol.....	Council, Idaho.	'29
Jones, William Ernest, Student, Washington State College.....	Pullman, Wash.	'29
Kantner, Ogden Austin, Student, Min. Engrg., Lehigh Univ.....	Bethlehem, Pa.	'30
Kirk, Samuel Albert, Student, Min. Engrg., South Dakota School of Mines, Rapid City, S. Dak.		'29
Knaebel, John B., Graduate Student, Stanford Univ.....	Stanford University, Cal.	'29
Kutz, Clarence A.....	617 W. Oak St., Stillwater, Minn.	'29
Lalicker, Cecil G., Student, Univ. of Oklahoma.....	229 W. Apache, Norman, Okla.	'29
Lasson, Glenn D., Student, Univ. of Utah, School of Mines.....	Salt Lake City, Utah.	'30
Lee, Arnott J., Student, Univ. of North Dakota.....	Grand Forks, N. D.	'29
LeVake, Clifford S., Special Second Helper, Open Hearth Dept., American Rolling Mill Co., East Wks., Middletown, Ohio.		'29
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Mason, W. Clark, Operator, Leaching plant, Inspiration Copper Co., Box 94, Inspiration, Ariz.		'29
Mathes, Joseph, Jr., Student Apprentice, Aluminum Co. of America, New Kensington, Pa.		'29
McCune, J. Stanley, Student, Univ. of Oklahoma.....	Norman, Okla.	'29
McLaughlin, William C., Student, New Mexico School of Mines.....	Socorro, N. M.	'29
Mensch, Henry D., Aluminum Club.....	New Kensington, Pa.	'29
Morgan, Raymond A., Student, Colorado School of Mines.....	Golden, Colo.	'29
Moss, H. C., Student, Univ. of Kentucky.....	Lexington, Ky.	'29
Mueller, Albert, Jr. Mine Engr., Braden Copper Co.....	Rancagua, Chile.	'29
Noel, Don O., Jr., Student, John Jay Hall, Columbia Univ.....	New York, N. Y.	'29
Oakeshott, Paul K., Geol., Roan Antelope Copper Mines, Ltd., N'dola, Northern Rhodesia, Africa.		'29
Odquist, Ronald E., Student, New Mexico School of Mines.....	Socorro, N. M.	'29
Ordenez, Georges, Lago Pet. Corp.....	Maracaibo, Venezuela.	'29
Paine, Frank Lester, Met., Standard Oil Co. of California.....	Richmond, Cal.	'29
Parris, Frank G.....	Clendenin, W. Va.	'29
Payne, Warren G., Student, Univ. of Alabama.....	Box L, University, Ala.	'29
Rex, Carl Boeing, Student, Univ. of Kentucky.....	350 Harrison Ave., Lexington, Ky.	'29
Rindlaub, John M., Student Min. Engr., Missouri School of Mines & Met.....	Rolla, Mo.	'29
Rynearson, Sylvester.....	5608 Howe St., Pittsburgh, Pa.	'29
St. Clair, Hillary Walter, Student, Univ. of Utah, School of Mines...	Salt Lake City, Utah.	'30
Sayers, M. J., Student, Colorado School of Mines.....	Golden, Colo.	'29
Schultz, Kenneth H., U. S. Zinc Co.....	Amarillo, Tex.	'29
Schumann, Gilbert, Student, School of Mines, Univ. of Idaho.....	Moscow, Idaho.	'29
Schweinfurth, Earl S., Student, Ohio State Univ.....	Columbus, Ohio.	'29
Schwittler, Charles M., Met., Research Bureau, Aluminum Co. of America, Cleveland, Ohio.		'29
Seifert, Wilbur Houston, Student, Carnegie Institute of Tech.....	Pittsburgh, Pa.	'29
Setter, A. George, Student, Colorado School of Mines.....	Golden, Colo.	'29
Shenefelt, Aubrey M., Student, Washington State College.....	Pullman, Wash.	'29
Shibata, Samuel Nisaku, Student, Univ. of Alabama.....	University, Ala.	'29
Smith, Charles E., Student, S.A.E. House, Colorado School of Mines.....	Golden, Colo.	'30
Smith, Hubert J. W., Research Dept., Chase Cos., Inc.....	Waterbury, Conn.	'29
Solomon, Weaver A., Chile Copper Co.....	Chuquicamata, Chile, Via Antofagasta.	'29
Sommerville, Richard V., Student, Univ. of Pittsburgh.....	Pittsburgh, Pa.	'29
Spangler, Carl V., Student, Min. Engrg., Ohio State Univ.....	Columbus, Ohio.	'29
Spencer, Paul S., Student, Pennsylvania State College.....	State College, Pa.	'30
Steele, Louis E., Shift Boss, Patatz Mill, Northern Peru Min. & Smelt. Co., Trujillo, Peru.		'29
Stens, E. Garcia, Min. Engr., Mill Shiftboss, The Northern Peru Min. & Smelt. Co., Apt. 162, Trujillo, Peru.		'29
Stewart, Homer Howard, Student, Univ. of California.....	Berkeley, Cal.	'30
Stonerock, W. H., Student, New Mexico State School of Mines.....	Socorro, N. M.	'30
Sullivan, Albert Martin, Student, Univ. of Oklahoma.....	Norman, Okla.	'29

Terry, Jack Mortimer, Student, Min. Engrg., New Mexico State School of Mines,	Socorro, N. M.	'30
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Wethington, William O., Student, Oklahoma Univ.....	Norman, Okla.	'29
Weyandt, Gerald N., Research Engr., Lukens Steel Co.....	Coatesville, Pa.	'29
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Wimber, Raymond E., Student, Univ. of Utah.....	Salt Lake City, Utah.	'29
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Zironi, Francis V., Student, Facultad de Ingenieria.....	Mexico City, D. F., Mexico.	'29

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Barrett, C. P.....	5338 Harper Ave., Chicago, Ill.	'28
Baum, Frank G.....	Hobart Bldg., San Francisco, Cal.	'28
Bayless, Hon. William S.....	Russ Bldg., San Francisco, Cal.	'28
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Beatty, Ross J.....	1105 First National Bank Bldg., Chicago, Ill.	'28
Benwell, Oswald F.....	205 Colorado National Bank, Denver, Colo.	'28
Beymer, Albert S., V.P., Keystone National Bank.....	Pittsburgh, Pa.	'28
Bingham, Charles W.....	1542 Hanna Bldg., Cleveland, Ohio.	'28
Blumenthal, Hugo.....	44 Pine St., New York, N. Y.	'28
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Bowlus, Thomas H.....	Iola, Kans.	'28
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Brown, Colvin B.....	Chamber of Commerce, Washington, D. C.	'28
Burt, Maxwell Struthers.....	Southern Pines, N. C.	'28
Campbell, Will A.....	The Independent, Helena, Mont.	'28
Chisholm, Archibald M.....	120 Broadway, New York, N. Y.	'28
Coleman, William W.....	575 Marshall St., Milwaukee, Wis.	'28
Collins, George H.....	Box 44, Vancouver, B. C., Canada.	'28
Collins, Hon. Jeremiah.....	Transportation Bldg., Washington, D. C.	'28
Collins, Ted E., Collins Land Co.....	Helena, Mont.	'28
Condon, Walter B.....	807 Lonsdale Bldg., Duluth, Minn.	'28
Cook, A. B.....	Helena, Mont.	'28
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Danziger, J. M.....	1006 Security Bldg., Los Angeles, Cal.	'28
Davidson, James E.....	Bay City, Mich.	'28
Driscoll, Robert H., First National Bank.....	Lead, S. D.	'28
Eaton, George O.....	30 El. 42nd St., New York, N. Y.	'28
Filor, Walter H.....	61 Broadway, New York, N. Y.	'28
Fobes, William H.....	Merchants National Bank Bldg., St. Paul, Minn.	'28
Franklin, N. E.....	230 Park Ave., New York, N. Y.	'29
Gilman, Samuel P.....	120 Broadway, New York, N. Y.	'28
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Hall, W. H.....	Box 363, Butte, Mont.	'28
Harlow, Richard A.....	Hockley, Park Lane, Rosslyn, Va.	'28
Hawkins, Russell.....	Portland Hotel, Portland, Ore.	'28
Hawley, Hon. James H.....	Boise, Idaho.	'28
Hays, Hon. Samuel H.....	Boise City National Bank Bldg., Boise, Idaho.	'28



Hill, C. P.	Hillhaven, Esquimalt Rd., Victoria, B. C., Canada.	'28
Hill, Louis W.	Great Northern Railway Bldg., St. Paul, Minn.	'28
Hitchcock, F. C.	3912 Woolworth Bldg., New York, N. Y.	'28
Hitchcock, Hon. Frank H.	1 E. 60th St., New York, N. Y.	'28
Hodgens, Thomas M.	Cameron, Mont.	'28
Hodges, George W.	14 Wall St., New York, N. Y.	'28
Hodges, William V.	319 Colorado National Bank Bldg., Denver, Colo.	'28
Holmes, Frank W.	14 Wall St., New York, N. Y.	'28
Holmes, R. C.	Room 708, 17 Battery Pl., New York, N. Y.	'23
Holt, Ben C.	903 Spring Arcade Bldg., Los Angeles, Cal.	'28
Holter, Hon. Norman B.	Helena, Mont.	'28
Howard, H. O.	Box 904, Phoenix, Ariz.	'28
Hunt, Hon. William H.	1101 Balfour Bldg., San Francisco, Cal.	'29
Hurvitch, Samuel	161 Devonshire St., Boston, Mass.	'28
Kellar, Chambers	Lead, S. D.	'28
Kennalley, John, Jr.	Apt. 657, Tampico, Tamps, Mexico.	'28
Kirby, Fred M.	Wilkes-Barre, Pa.	'28
Kittle, Gilbert R., Ohio Malleable Iron Co.	Columbus, Ohio.	'28
Knox, Renwick B.	1314 E. Superior St., Duluth, Minn.	'28
Kohlberg, Walter L.	1311 Montana St., El Paso, Tex.	'28
Kroger, Walter W.	Philipsburg, Mont.	'28
Leonard, Franklin, Jr.	25 Broad St., New York, N. Y.	'28
Lindsley, Henry D.	Instructed to hold everything.	'28
Littlefield, C. W.	Union League Club, New York, N. Y.	'28
Loomis, R. A.	Apt. 210, Guatemala City, Guatemala.	'28
Loring, Augustus P.	82 Devonshire St., Boston, Mass.	'28
Manson, W. O.	757 Sutter St., San Francisco, Cal.	'28
Mantle, Hon. Lee	635 So. Rimpau Blvd., Los Angeles, Cal.	'23
Masten, Fred C.	323 Fourth Ave., Pittsburgh, Pa.	'28
McClurg, Gilbert	619 N. Cascade Ave., Colorado Springs, Colo.	'28
McConnell, O. J.	Henderson Harbor, Jefferson County, N. Y.	'28
McDowell, Hon. William W.	46 East Broadway, Butte, Mont.	'28
McHarg, Henry K., Jr., Detroit & Mackinac Railway Co.	East Tawas, Mich.	'28
McMahon, Francis M.	1041 No. Laurel St., Hollywood, Cal.	'28
Meyerhoff, Emmet F.	14839 Gilmore St., Van Nuys, Cal.	'28
Miller, W. Clayton	The Westminster, Spokane, Wash.	'28
Mills, J. H. G.	11 Wall St., New York, N. Y.	'28
Morch, Thomas	1201 Chestnut St., Philadelphia, Pa.	'28
Mott, Howard S.	170 Broadway, New York, N. Y.	'28
Muller-Schall, F.	160 Broadway, New York, N. Y.	'28
Murphy, Dan	1117 Trust & Savings Bank Bldg., Los Angeles, Cal.	'28
Nebeker, Hon. Charles Morehead	216 Georgina Ave., Santa Monica, Cal.	'28
Nicholls, Walter J.	202 Standard Stock Exchange Bldg., Spokane, Wash.	'28
Nichols, Morton C.	1 East 39th St., New York, N. Y.	'28
O'Connor, John W.	1050 Pennsylvania St., Denver, Colo.	'28
Orndorff, R. Burt	301 Protective Life Bldg., Birmingham, Ala.	'28
Osgood, Frank H., Retired	326 Central Bldg., Santa Barbara, Cal.	'28
Overfield, Chauncey P.	Dooly Bldg., Salt Lake City, Utah.	'28
Page, William H.	55 Liberty St., New York, N. Y.	'28
Palmer, Howard	Hotel Mohican, New London, Conn.	'28
Palmer, William F.	Box 119, Pioche, Nev.	'28
Palmer, William J., Pres., Amalgamated Pioche Mines & Smelters Corp.	Room 2158, 420 Lexington Ave., New York, N. Y.	'28
Parsons, Noel, Parrish & Co.	Barranquilla, Colombia.	'28
Parsons, R. H.	2300-2305 Northern Life Tower, Seattle, Wash.	'28
Pettengill, H. J., Pres., Southwestern Bell Tel. Co.	St. Louis, Mo.	'28
Phelan, James J.	60 Congress St., Boston, Mass.	'28
Pierce, Henry J.	2 Rector St., New York, N. Y.	'28
Pirnie, Malcolm, Civil Engr.	25 W. 43rd St., New York, N. Y.	'28
Pogson, A. H.	350 Madison Ave., New York, N. Y.	'28
Poliskoff, R.	Room 1009, 709 Sixth Ave., New York, N. Y.	'28
Ramsey, Hon. George L.	44 W. 44th St., New York, N. Y.	'28
Reed, W. B.	143 W. 69th St., New York, N. Y.	'28
Richardson, W. E.	Van Nuys Bldg., Los Angeles, Cal.	'28
Rodgers, Harry L.	92 William St., New York, N. Y.	'28
Ryan, Edwin P., Apt. El Potosi Min. Co.	Apt. 13, Chihuahua, Chih., Mexico.	'28
Ryan, Richard S.	635 Riverside Dr., New York, N. Y.	'28

# ROCKY MOUNTAIN MEMBERS

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Sanger, John F.....	1707 San Vincente Blvd., Santa Monica, Cal.	'2
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Schall, F. W.....	115 Broadway, New York, N. Y.	'2
Sellwood, Richard M.....	811 Sellwood Bldg., Duluth, Minn.	'2
Shaw, Percival M., Jr.....	318 Lyceum Bldg., Duluth, Minn.	'2
Shepherd, Owen, Treas., International Paper Co.....	Pershing Sq. Bldg., New York, N. Y.	'2
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Shove, Eugene P.....	Colorado Springs, Colo.	'2
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Smith, H. Alexander, Bankers Trust Co.....	26 Old Broad St., London, E. C. 2, England.	'2
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Soss, Joseph, Pres., Soss Mfg. Co.....	Roselle, N. J.	'2
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Swinehart, D. E., Interstate Lumber Co.....	Missoula, Mont.	'2
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   Winters, R. W.  
   Witt, A. H.  
   Yerkes, S. L.  
 Columbiana.—Taylor, J. H.  
 Dolomite.—Eadie, J.  
 Ensley.—Allen, A. W.  
   Bowron, R. L.  
   Landgrebe, K. L.  
   Meade, R.  
 Fairfield.—Gambrill, G. T., Jr.  
   Millar, W. D.  
 Flat Creek.—Wingard, J. I.  
 Gantt's Quarry.—Runge, W. H.  
 Lewisburg.—Harper, A. F.  
 Montgomery.—Moffett, C. A.  
 Pratt City.—McHugh, J. M.  
 Sayreton.—Morris, F. G.  
 Shannon.—Beaver, J. J.  
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   Bird, B. M.  
 University.—Cothorn, L. I.  
   Cudworth, J. R.  
   Gandrud, B. W.  
   Jones, W. B.  
 Woodward.—Crockard, F. H.  
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## ALASKA

Bear Creek.—Hirsh, R. T.  
 Chichagof.—Lorain, S. H.  
 College.—Henton, H. M.  
   Patty, E. N.  
 Dan Creek.—Birch, G. H.  
 Fairbanks.—Earling, R. B.  
   Egleston, O. J.  
   Hopkins, J. E.  
   Lingo, G. A.  
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   McFarland, W. H. S.  
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   Pilgrim, E. R.  
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   McConnell, H.  
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   Merrill, M. E.  
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   Richelsen, W. A.  
 Latouche.—Hackwood, A. W.  
 Nome.—Hellerich, G.  
 Thane.—Phillips, S. E.  
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## ARIZONA

Ajo.—Curley, M.  
   Du Moulin, W. L.  
   Nelson, H. A.  
   Potter, J. A.  
   Repass, M. M.  
   Smith, R. N.  
   Snyder, H. L.  
   Wyner, A. S.  
 Benson.—Curry, J. E.  
 Bisbee.—Coltrin, W. A.  
   Hayes, F. H.  
   Hodgson, J. P.  
   Motz, R. L.  
   Pelton, R. T.  
   Reifsnider, A. C.  
   Stover, C. A.  
 Casa Grande.—Williams, P. A.  
 Christmas.—Clayberg, G. A.  
   Hendricks, S. D.  
   Robinson, L. M.  
 Chrysolite.—Stewart, L. A.  
 Clarkdale.—Crawford, A. M.  
   Douglas, G. M.  
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   Lanning, J. E.  
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 Clemenceau.—  
   Ambler, C. W., Jr.  
   Prince, G. W.  
 Dos Cabezas.—  
   Prout, J. W., Jr.  
 Douglas.—Ambler, J. O.  
   Beckett, P. G.  
   Clark, M.  
   Cody, B. H.  
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   Douglas, J. S.  
   Legrand, C.  
   Pigott, C.  
   Samuel, J. M.  
   Sherman, G. F.  
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Gleeson.—Giroux, F. W.  
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   Duncan, H. S.  
   Hoar, F. W.  
   Osborn, W. X.  
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   Woodward, F. A.  
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   Colvocoresses, G. M.  
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Smith, H. A.  
Whiteley, E. E.  
Yuma.—Neal, W. M.

# ARKANSAS

Bauxite.—Eilertsen, D. E.  
Skeels, W. S.  
Charleston.—Lake, J. F.

El Dorado.—Wilson, M. E.  
Fayetteville.—Drake, N. F.  
Giles, A. W.  
Ft. Smith.—Delaloye, A. F.  
Guion.—Dunkin, D. D.  
Hot Springs.—Fordyce, J. R.  
Little Rock.—Bird, E.  
Branner, G. C.  
Paris.—Denman, H.  
Roston.—Jarvis, W. L.  
Russellville.—McCurry, J. A.  
Yellville.—LeVasseur, C.

# CALIFORNIA

Alberhill.—Zehm, R. C.  
Alhambra.—Gormly, S. J.  
Altadena.—Paymal, G. W.  
Anaheim.—McColloms, M. R.  
Salisbury, G. W.  
Seares, H. L.  
Angels Camp.—Kirby, A. C.  
Arcadia.—Maxwell, A. B.  
Bakersfield.—Abraham, A. W.  
Jennings, J. M.  
Hitson, H. W.  
May, A. R.  
Saunders, L. W.  
Siegfus, S. S.  
Suverkrop, L.  
Wardner, W. R.  
Barstow.—Engelder, O. G.  
Bartlett.—Dub, G. D.  
Belle Vernon.—Phythyon, H.  
Berkeley.—Averill, C. V.  
Berkefeld, P. C.  
Bloom, C. V.  
Butters, C.  
Collbran, A. H.  
Dunshoe, B. H.  
Gahl, R.  
Garthwaite, E. H.  
Gladkov, V.  
Gribben, D. H.  
Grishkevich, V. I.  
Harroun, D. H.  
Hazzard, J. C.  
Hersam, E. A.  
Hulin, C. D.  
Huston, H. L.  
Lawson, A. C.  
Lewis, J. H.  
Louderback, G. D.  
MacCoy, F.  
Mahoney, G. C.  
Maier, C. G.  
McMeekin, C. W.  
Morley, W. S.  
Parker, D. J.  
Probert, F. H.  
Rickard, T. A.  
Robins, L. R.  
Rodriguez, A. I.  
Sharwood, W. J.  
Stewart, J. S.  
Taliaferro, N. L.  
Turner, R. C.  
Tweedt, A. M.  
Uren, L. C.  
Vedensky, D. N.  
Weeks, W. S.  
Beverly Hills.—Beyer, C. E.  
Platt, J. M.  
Walker, E. W.  
Wolfe, G.  
Bishop.—Montgomery, W. B., Jr.  
Bradley.—Briggs, C. W.  
Brea.—Chonette, W. C.  
Burbank.—Irving, D. R.  
Burlingame.—Busey, A. P., Jr.  
Collins, F. W.  
Dakin, F. H., Jr.  
Frolli, A. W.  
Calexico.—Fournier, E. A.  
Calistoga.—Hieber, C. A.

Chatsworth.—van Barneveld, C. E.  
Chula Vista.—Wolfe, U. G.  
Clear Lake.—Bradley, W., Jr.  
Coalinga.—Beissinger, V. J.  
Colfax.—Basso, C. E.  
Darwin.—Farnham, L. L.  
Davenport.—Davis, L. R.  
Death Valley.—Corkill, F. W.  
Duarte.—Scott, A.  
Eagle Rock.—Menardi, H. B.  
East San Gabriel.—Cortelyou, A. P.  
Emeryville.—Martin, J. S.  
Pike, R. D.  
West, G. H.  
Engelmine.—Nelson, W. I.  
Fontana.—Smедdle, J.  
Fresno.—Brenngan, A. J.  
Twining, F. E.  
Fullerton.—Anderson, A.  
Hancock, R. A.  
Gazelle.—Wright, F. A.  
Glendale.—Carper, A. F.  
Clark, W. L.  
Hudson, F. S.  
McKinnis, C.  
Thede, G. E.  
Glendora.—Wiley, W. H.  
Gottville.—Logan, W. W.  
Grass Valley.—Bedford, R. H.  
Ferguson, C.  
Foote, A. B.  
Nobs, F. W.  
Starr, G. W.  
Greenville.—Hart, V. A.  
Guerneville.—Messer, L. R.  
Hinkley.—King, C. R.  
Hollywood.—Calkins, F. E.  
Everest, H. A.  
Holland, L. F. S.  
Hyde, J. M.  
Keller, E.  
Marquardt, E.  
Parker, H. C.  
Partridge, N. H.  
Radcliffe, D. H.  
Rudderow, W. V.  
Huntington Park.—Bannon, T. C.  
Hastings, J. B.  
Independence.—Given, P. A.  
Jackson.—Scott, W. E., Jr.  
Sheafe, H. J.  
Johannesburg.—Fox, J. M.  
La Mesa.—Wolf, M. Y.  
Lankershim.—Molyneux, F. N.  
Lincoln.—Tupper, O. M., Jr.  
Lockeford.—Paterson, A. M.  
Lone Pine.—Skinner, L. V.  
Long Beach.—Barton, C. L.  
Brown, W. M.  
Danley, G. E.  
Dugger, R. B.  
Lane, T. P.  
Linney, W. H.  
McMahan, C. H.  
Neuhaus, C. E.  
Roripaugh, C. C.  
Utter, G. H.  
Vrang, C.  
Los Altos.—Colman, M. N.  
Los Angeles.—Acres, T. H.  
Adams, C. W.  
Adams, G. L.  
Agens, W. H.  
Alderman, R. L.  
Ames, G.  
Arnold, R.  
Ashton, F.  
Baash, L. F.  
Bates, B. R.  
Beal, C. H.  
Bell, A. H.

## Los Angeles.—Continued.

Berray, T.  
 Bierce, E. C.  
 Bissell, M. H.  
 Blackmer, W. D.  
 Boyd, J.  
 Boyd, R. R.  
 Bradley, J. W.  
 Bradley, W. H.  
 Brown, J. A.  
 Browning, W. C.  
 Brundred, L. L.  
 Burch, H. K.  
 Butler, C.  
 Butler, R. S.  
 Butterworth, E. M.  
 Camphuis, G. A.  
 Carpenter, A. B.  
 Chamberlain, J. B.  
 Chandler, A. R.  
 Charles, W. W.  
 Chase, R. L.  
 Chiapella, S. E.  
 Clark, W. G.  
 Clements, D. S.  
 Close, F. B.  
 Condit, D. D.  
 Copp, W. W.  
 Crawford, H. E.  
 Crerar, G.  
 Crowder, J. P.  
 Crowley, A. J.  
 Curry, J. B.  
 Cutler, W. W., Jr.  
 Dalton, M. P.  
 Daniell, J.  
 Davis, E. F.  
 Deavitt, W. J.  
 Deegan, J.  
 de Landero, C. F.  
 Dodge, J. F.  
 Dyer, H. H.  
 Eddy, H. C.  
 Edwards, M. G.  
 Elliott, J. E.  
 Emmens, N. W.  
 English, W. A.  
 Enos, H. C.  
 Ferguson, R. N.  
 Fitch, M. B.  
 Foster, E. D.  
 Gale, H. S.  
 Gee, J. E.  
 Geis, W. H.  
 Gemmill, D. B.  
 Gillan, S. L.  
 Goodloe, M.  
 Goodwin, G. L.  
 Goudkoff, P. P.  
 Graham, S. C.  
 Gross, H. E.  
 Guiberson, S. A., Jr.  
 Hall, E. B.  
 Hamilton, T. M.  
 Harrod, W. A.  
 Harvey, A. S.  
 Hay, H.  
 Heberling, W. G.  
 Henderson, L. H.  
 Henegar, H. B.  
 Henny, G.  
 Herman, J.  
 Herold, S. C.  
 Higgins, E.  
 Hodge, J. E.  
 Hodges, A. B. W.  
 Hogoboom, W. C.  
 Honnold, W. L.  
 Hood, R. H.  
 Huffman, D. E., Jr.  
 Huneke, A. J.  
 Ickes, E. L.  
 Ivy, W. R.  
 Jackson, B. N.  
 Jakosky, J. J.  
 Jennings, E. B.

## Los Angeles.—Continued.

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 Johnson, A. M.  
 Johnson, H. N.  
 Johnson, H. R.  
 Johnston, F. L.  
 Jones, C. C.  
 Jones, W. M.  
 Joslin, G. A.  
 Jurin, V. N.  
 Kew, W. S. W.  
 Kivari, A. M.  
 Kleinpell, W. D.  
 Kollberg, F. B.  
 LaRue, W. G.  
 Leffingwell, W. H.  
 Lindau, S. P.  
 Linton, R.  
 Loel, W.  
 Long, J. I.  
 Lund, R. E.  
 Macready, G. A.  
 Martin, J. W.  
 Mason, R. T.  
 McCollom, C. R.  
 McDermott, A. M.  
 McDonald, J. A.  
 McKanna, E. A.  
 McLaine, W. L.  
 McLaughlin, R. P.  
 Mead, R. G.  
 Menefee, A. B.  
 Merritt, F. C.  
 Moore, E. W.  
 Moore, M. J.  
 Moore, R. W.  
 Moran, R. B.  
 Morgan, H. J.  
 Morrison, J. E.  
 Morse, R. R.  
 Moss, F. A.  
 Mudd, H. S.  
 Murphy, J. G.  
 Myers, D. B.  
 Nickerson, C. M.  
 Noble, E. B.  
 Nordenholt, G. D.  
 O'Keeffe, J., Jr.  
 Oliver, F.  
 Olund, H. E.  
 Osborne, C. B.  
 Painter, R. K.  
 Palmer, C. H., Jr.  
 Parsens, B. E.  
 Peirce, G. G.  
 Pemberton, J. R.  
 Penhoel, L. C.  
 Pentegoff, V. P.  
 Peterson, O. P.  
 Phillips, J. L.  
 Pippin, G. I.  
 Porter, W. W., 2nd.  
 Pratt, G. H.  
 Prouty, R. W.  
 Putnam, H. L.  
 Rattle, P. S.  
 Remington, A. E.  
 Rhoades, R. S.  
 Rider, E. B.  
 Riotte, E. N.  
 Robertson, G. D.  
 Robertson, J. T.  
 Roper, N. B.  
 Royer, F. W.  
 Rubel, A. C.  
 Sandstrom, C. O.  
 Sanford, C. O.  
 Schilling, G. W.  
 Schmidt, W. A.  
 Senseman, W. B.  
 Shimmmin, J. T.  
 Sievert, G. E.  
 Sill, H. A.  
 Sill, R. T.  
 Siwyer, L. D.  
 Snyder, E. M.

## Los Angeles.—Continued.

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 Soper, E. K.  
 Souden, O. M.  
 Stadtmueller, K. C.  
 Staunton, W. F.  
 Stewart, I. E.  
 Stipp, T. F.  
 Stoddart, A. W.  
 Stromborg, O.  
 Strong, A. M.  
 Stroud, B. K.  
 Sully, K. M.  
 Swigart, T. E.  
 Syverson, A.  
 Tanner, W. B.  
 Taubert, C.  
 Taylor, H. B.  
 Temple, C. E.  
 Thomas, E. G.  
 Thornton, E.  
 Throckmorton, H.  
 Travers, W. J., Jr.  
 Trimble, R. P.  
 Turner, J. K.  
 Van Arsdale, G. D.  
 Van Burgh, L. R.  
 Van Gundy, J. E.  
 Van Wagenen, H. R.  
 Vaughan, F. E.  
 Vedder, D. G.  
 Vickery, F. P.  
 Waldorf, C. O.  
 Walker, W. L.  
 Warner, T.  
 Warren, V. C.  
 Wartenweiler, O.  
 Weisenburg, L. E.  
 Welch, H. V.  
 White, G. E.  
 Whitman, A. R.  
 Whittier, W. H.  
 Wickersham, N. W.  
 Wickes, L. W.  
 Wilhelm, V. H.  
 Williams, P. A.  
 Wilson, C. H.  
 Wilson, E. C.  
 Wilson, G. B.  
 Wimmeler, N. L.  
 Wiseman, P.  
 Wishon, W. W.  
 Wright, F. L.  
 Young, W. G.  
 Zandmer, S. M.  
 Zimmerman, J. R.  
 Zublin, J. A.  
 Los Gatos.—Corbus, J. P.  
 Madera.—Wallerstedt, G. A.  
 Magalia.—Hilliard, W. A.  
 Mariposa.—King, W. H.  
 McKittrick.—Coleston, C. E.  
 Kleeman, A. P.  
 Mentone.—Rolfé, W. J.  
 Merced.—McCanless, W. A.  
 Mocalno.—Frenzell, E. H.  
 Monrovia.—Henley, A. S.  
 Mt. Bullion.—Woodbridge, D. E.  
 Muroc.—Balling, W. M.  
 Nevada City.—Bettles, G. M.  
 McCraney, O.  
 Newark.—Sperr, J. D.  
 Oakland.—Alling, M. N.  
 Anderson, A. P.  
 Bradley, G. O.  
 Brayton, C. C.  
 Browne, R. E.  
 Browne, S. C.  
 Canfield, G. H.  
 Coe, I. J.  
 Coffey, G. T.  
 Cox, T.  
 Dollard, E. J.  
 Girard, F. J.  
 Haas, H.  
 Hoffmann, R. B.



## Oakland.—Continued.

Lasier, E. L.  
Latham, M. L.  
Little, B. P.  
Oatridge, O. G.  
Oliver, R. L.  
Rice, E. R.  
Smith, S. S.  
Swift, E. L.  
Thompson, A. P.  
Weck, C. A.  
Young, G. S.

Oceanside.—Dunster, C. B.  
MacDonald, B.

Oleum.—Heise, A. R.

Orange.—Cummings, W. N.

Pacific Palisades.—Mills, R. F.

Palms.—Blades, E. O.

Palo Alto.—Avery, P. W.

Draper, F. W.

Neel, C. B.

Ray, J. C.

Palos Verdes Estates.—Tizard, W. E.

Pasadena.—Braly, N. B.

Cole, T. F.

Collins, T. H.

Engel, R.

Hurt, E. P.

Kato, B.

MacKay, H. S.

Neill, J. W.

Pitner, P. J.

Potter, C. F.

Ransome, F. L.

Ricketts, L. D.

Roeser, F.

Salisbury, O. J.

Sandberg, E.

Slayden, H. L.

Underwood, A. J.

Van Slyke, W. R.

Pleasanton.—Briggs, W. M.

Plymouth.—Arnot, S. L.

Point Loma.—Cailand, D. S.

Pomona.—Barke, A. C.

Rancho Santa Fe.—Wallace, L. R.

Raymond.—Stoneham, C. J.

Redlands.—Lodge, R. W.

Smith, F. W.

Redwood City.—Nickel, W. F.

Richmond.—Hess, L. R.

King, K. V.

Radcliffe, T. D.

Riverside.—Austin, W. L.

Bryant, G. W.

Geary, J. F.

Roscoe.—Gardiner, C. M.

Ryan.—Gower, H. P.

Sacramento.—Baillie, F. S.

Bunyan, F. W.

St. Helena.—Landfield, J. B.

Salinas.—Williams, J. M.

San Andreas.—Townsend, R. H.

San Bernardino.—Beckwith, H. T.

Claypool, W. M.

Terrill, A. C.

San Diego.—Baumgarten, K.

Budrow, L. R.

Herreshoff, J. B., Jr.

Innes, M.

Marcy, F. E.

Richmire, G. L.

Smiley, J. B.

Wilson, G.

San Fernando.—Snow, F. W.

San Francisco.—Adams, L. D.

Anderson, A. J.

Atkins, D.

Austin, B. C.

Austin, E. A.

## San Francisco.—Continued.

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Barber, R. J.  
Barbour, T. J.  
Barneson, J.  
Beall, R. S.  
Benjamin, E. H.  
Bishop, R. N.  
Bjorge, G. N.  
Blackburn, W. H.  
Blake, E. T.  
Blood, G. D.  
Borden, G. S.  
Bowie, C. P.  
Boyd, W. S.  
Bradley, F. W.  
Bradley, P. R.  
Bradley, W. W.  
Brewer, A. K.  
Brown, R. F.  
Bruff, C. E.  
Brunel, L. J.  
Buckingham, F. A.  
Bullard, E. W.  
Bunker, C. E.  
Bush, R. D.  
Campbell, A. B.  
Carlisle, H. C.  
Carrigan, A.  
Carson, A. C.  
Chandler, C. S.  
Channing, R. H., Jr.  
Check, E. E.  
Christie, W. H.  
Clark, D.  
Clark, G. M.  
Cleaveland, N.  
Costello, J. C.  
Crook, T. H.  
Davis, F. F.  
Dickenson, E. H.  
Dolman, P. B.  
Dolton, W. E.  
Duschak, L. H.  
Eye, C. M.  
Farrell, J. H.  
Folsom, D. M.  
Forney, H. C.  
Forstner, W.  
Geiger, A. W.  
Gester, G. C.  
Gilbert, J. C.  
Gilman, C. E.  
Gould, H. W.  
Grant, W. H.  
Griffin, F. W.  
Grumbine, R. W.  
Guernsey, J. B.  
Haehl, H. L.  
Hall, R. G.  
Hamilton, E. M.  
Hammersmith, F. A.  
Hammon, W. P.  
Hanks, A. A.  
Hardy, E. A.  
Harris, T. D.  
Hawthurst, R., Jr.  
Hazen, H. L.  
Heikes, V. C.  
Hershey, O. H.  
Hilby, G. R.  
Hill, J. M.  
Holman, F. C.  
Humphrey, R. H.  
Hutchinson, E. C.  
Janin, C.  
Jarman, A.  
Joralemon, I. B.  
Julian, E. A.  
Kerr, J. B.  
King, C. B.  
Kinzie, R. A.  
Kinzie, R. A., Jr.  
Knowles, E. C.  
Laizure, C. McK.

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Lane, J. A.  
Lennox, L. W.  
Locke, A.  
Lombardi, M. E.  
MacNichol, A. W.  
Marshall, C. B.  
Martius, F. T.  
McClure, D.  
McCurdy, E. S.  
McLaughlin, A. C.  
McLaughlin, D. E.  
Mein, W. W.  
Merrill, C. W.  
Mills, L. D.  
Milton, M. C.  
Mitchell-Roberts, J. F.  
Morris, F. L.  
Munro, C. H.  
Newman, M. A.  
Newland, R. C.  
Noyes, W. S.  
Nutter, E. H.  
Oliver, E. L.  
Palmer, R. T.  
Palmer, S. L.  
Parmelee, J. G.  
Perry, O. B.  
Pickard, B. O.  
Plate, H. R.  
Pogrebniak, J. J.  
Pollak, R. R.  
Pomeroy, H. G.  
Quinby, H. D.  
Radford, W. H.  
Rains, L. F.  
Rawlings, S. L.  
Reece, O.  
Reeves, T. V.  
Requa, L. K.  
Requa, M. L.  
Richard, L. M.  
Richards, H. DeC.  
Rieber, F.  
Roberts, E. J.  
Roberts, J. R.  
Rocca, B. T.  
Rohlfis, W. V.  
Romanowitz, C. M.  
Rosenblatt, G. B.  
Sanders, C. C.  
Schuette, C. N.  
Shanks, D. W.  
Shores, E.  
Sielaft, G. J.  
Simkins, W. A.  
Sizer, F. L.  
Slosson, H. L., Jr.  
Smirnoff, T. V.  
Stalder, W.  
Stebbins, E. W.  
Stickney, A. W.  
Stroup, J. C.  
Swent, J. W.  
Taff, J. A.  
Taylor, A. W.  
Thorne, W. E.  
Tremoureux, R. E.  
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Udell, A. V.  
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Wagy, E. W.  
Wallace, F. W.  
Wells, B.  
White, C. H.  
White, L. C.  
Wiel, S. C.  
Wilkinson, E. W.  
Williamson, F. O.  
Witt, H. N.  
Wood, H. E.  
Woodworth, S. E.  
Woolsey, W. J.  
Yokel, F. C.  
Young, G. J.  
Zentner, A.

San Jose.—Jenks, A. W.  
 San Leandro.—Huber, P.  
 San Luis Obispo.—Steiner, C. A.

San Marino.—Pattison, E. H.  
 San Pedro.—Hudson, R. C.  
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 Mott, L. C.  
 Osgood, W. H.

Santa Barbara.—Johnston, F. L.  
 Knight, E. C.  
 Tudor, J. W.  
 Webb, H. H.  
 West, H. E.

Santa Fe Springs.—Melville, A. G.  
 Santa Maria.—Scott, G. M.  
 Santa Monica.—Abeel, G. H. Jr.

Dick, J. E.  
 Hallett, W. J.  
 McIntyre, E. E.  
 McKay, H. S.  
 Morse, W. S.  
 Ridge, W. R.  
 Schader, C. F.  
 Vallat, B. W.

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 Sausalito.—Wyatt, J. S.  
 Selby.—Cary, W. P.

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 Sierra City.—Lytzen, W. W.  
 So. Pasadena.—Martin, F. O.

Perry, F. E.  
 Smith, H. P.  
 Spenceville.—Leppien, E.

Spring Garden.—  
 Antoshkin, D. E.  
 de Arrieta, C.  
 Ellis, E. W.  
 Geisendorfer, H. A.  
 MacLellan, D. D.

Stanford University.—Blackwelder, E.  
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 Dietrich, W. F.  
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 Greninger, A. B.  
 Hoover, T. J.  
 Jenkins, O. P.  
 Kellogg, L. O.  
 Knaebel, C. P.  
 Morse, H. W.  
 Paine, R. E.  
 Putnam, W. C.  
 Shedd, S.  
 Shepard, O. C.  
 Tickell, F. G.  
 Willis, B.

Stockton.—Anderson, W. G.  
 Gaebelein, P. W.

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 Spiers, J.

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 Clark, W. A.  
 Henderson, A. D., Jr.  
 Hunt, L. W.  
 Parks, E. K.  
 Patterson, R. C.  
 Waldner, C. E. de la G.

Tecopa.—Godshall, L. D.  
 Torrance.—Kresse, O. A.

Trinity Center.—Estabrook, W. H.

Trona.—Henderson, M. J.  
 Mittendorf, C. O.

Tujunga.—Wolfen, H. M.

Upland.—Woodbridge, T. R.

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 Solomon, F. W.

Ventura.—Hertel, F. W.

Vernon.—Benjamin, G. T.

Visalia.—Read, C. W.  
 Washington.—Bradley, J.  
 Westmoreland.—Sandberg, A.  
 Whittier.—Holt, T. P.

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 George, R. D.  
 Johnston, W. R.  
 Sterling, R.  
 Teal, G. W.

Breckenridge.—  
 Henderson, R. M.  
 Histed, H.  
 Radford, W. J.

Buena Vista.—Aicher, C. P.  
 Canon City.—Jones, R. L.  
 Pinkney, H. D.

Climax.—Coulter, W. J.  
 Heinrichs, W. E.  
 Landon, B. A.  
 Linn, H. K.

Colorado Springs.—  
 Ady, J. W., Jr.  
 Beardsley, W. R.  
 Carlton, A. E.  
 Harner, L. S.  
 Hawkins, J. D.  
 Moore, W. G.  
 Penrose, S.  
 Shoup, O. H., Jr.  
 Thayer, H. S.  
 Van Diest, E. C.  
 Vidler, L. W.  
 Wagoner, G. E.

Cowdrey.—Cloonan, M. P.

Craig.—Croft, L. R.

Creede.—Withrow, D. G.

Cripple Creek.—  
 Arthur, E. P., Jr.  
 Gardiner, R.

Denver.—Aitken, A. D.  
 Allen, A. R.  
 Ashbaugh, L. E.  
 Ball, M. W.  
 Bartram, J. G.  
 Blose, S.  
 Bostwick, F. H.  
 Bosworth, H. O.  
 Bretschneider, H. C.  
 Brown, H. L.  
 Campbell, T. P.  
 Carper, J. O. A.  
 Carstarphen, F. C.  
 Cazin, F.  
 Chase, C. A.  
 Chase, E. E.  
 Clarke, R. H.  
 Cohen, L.  
 Coke, J. M.  
 Colburn, C. L.  
 Collins, G. E.  
 Coolidge, M. H., Jr.  
 Courtier, W. H.  
 Cox, W. J.  
 Croasdale, S.  
 Davies, F. A.  
 Davis, H. E.  
 Denny, E. H.  
 Dobbin, C. E.  
 Dumont, J. M.  
 Dutton, D. A.  
 Dyrenforth, D.  
 Eames, L. B.  
 Emanuel, L. V.  
 Erdmann, C. E.  
 Evans, J. C.  
 Ewing, J. A.  
 Fees, L. V.

# Denver.—Continued.

Filteau, C. A.  
 Finch, J. W.  
 Fischer, O. A.  
 Fisher, C. A.  
 Fraker, G. E.  
 Gibson, F. D.  
 Glasgow, C. M.  
 Gordon, R. W.  
 Greenawalt, W. E.  
 Grove, C.  
 Harrison, T. S.  
 Haynes, J. H.  
 Heggie, J.  
 Henderson, C. W.  
 Higgins, D. F.  
 Holt, M. B.  
 Horn, G. J.  
 Hutton, M.  
 Ionides, S. A.  
 Johnson, A. E.  
 Johnson, O. H.  
 Kauffman, H. L.  
 Kithil, K. L.  
 Knight, D. A.  
 Ladner, A. L.  
 Leonard, W. H.  
 Lewis, G.  
 Livingstone, C. H.  
 Lowden, H. B.  
 Lunt, H. F.  
 Lupton, C. T.  
 MacCarthy, M. S.  
 Mace, C. H.  
 Magraw, R. M.  
 Marriott, A. D. Jr.  
 Mather, C. C.  
 McDaniel, A. K.  
 McKechnie, B. E.  
 McNeill, H. L.  
 Modesitt, C. L.  
 Moore, P. N.  
 Morris, W. J.  
 Morton, R. B.  
 Noble, L. S.  
 Norman, J. E.  
 Packard, H. J.  
 Parker, C. O.  
 Parker, E. H.  
 Parker, R. A.  
 Perkins, A. E.  
 Perry, J. G.  
 Perry, R. M.  
 Porter, W. E.  
 Prommel, H. W. C.  
 Read, J. B.  
 Reybold, E. C., Jr.  
 Rich, J. D.  
 Richards, J. W.  
 Rickard, F.  
 Rodgers, J. H.  
 Ruth, J. P., Jr.  
 Savage, H. K.  
 Sayre, R. H.  
 Sessinghaus, G.  
 Shepard, F. E.  
 Stahl, G. A.  
 Stearns, T. B.  
 Stewart, H. A.  
 Storm, H. A.  
 Tarkington, G. W.  
 Taylor, F. M.  
 Teats, R.  
 Tedrow, H. L.  
 Tuller, C. H.  
 von Buelow, E. U.  
 Warner, J. H.  
 Weintz, C. A.  
 Welborn, J. F.  
 Whitaker, O. R.  
 Willey, E. R.  
 Williamson, H. M.  
 Wilson, E. T.  
 Yetter, E. J.

**Durango.**—Aller, F. D.  
Fominyh, M. P.  
Pomeroy, R. E. H.  
Wallage, S. T.  
**Edgewater.**—Starkweather, H.  
**Eureka.**—Probert, A.  
**Florence.**—Utley, H. H.  
**Fort Collins.**—  
Gallagher, W. G., Jr.  
**Garfield.**—Rogers, G. R.  
**Georgetown.**—  
Kirkpatrick, J. C.  
**Gilman.**—Adams, S. F.  
Buck, A. H.  
Garnett, T. H.  
Hayes, A. L.  
Lary, H. N.  
Maloit, F. J.  
Stockder, H. J.  
**Golden.**—Bell, C. N.  
Boyd, J.  
Carpenter, C. B.  
Coolbaugh, M. F.  
Gardner, P. S., Jr.  
Heiland, C. A.  
Huleatt, W. P.  
Ingham, W. I.  
Johnson, J. H.  
Jones, T. H. E.  
Kobey, S. M.  
Lovering, T. S.  
Malkovsky, J. A.  
Morgan, J. R.  
Palmer, I. A.  
Stansmore, K. C.  
Strable, G. F.  
Van Tuyl, F. M.  
Warren, S. P.  
Weinig, A. J.  
Wilson, J. H.  
**Idaho Springs.**—Barry, C. W.  
Barry, D. A.  
Harrington, C. L.  
Underhill, J.  
Winser, H. E.  
**La Plata.**—Logue, C. L.  
**Leadville.**—Chapman, E. P.  
Dickerman, E. D.  
Leonard, W. D.  
McDonald, J. F.  
Mee, W. P.  
Wallower, H. H.  
**Mineral Hot Springs.**—  
Botsford, G. B.  
**Montrose.**—Willmarth, O. B.  
**Mt. Harris.**—Anderson, L. G.  
Davis, G. C.  
**Oak Creek.**—McConnell, C. M.  
McFarlane, G. C.  
**Ohio City.**—Riley, L. B.  
**Ouray.**—McCullough, W. A.  
**Pueblo.**—Christy, H. H.  
Marsh, A. G.  
Marsh, G. A.  
Maxwell, W. A., Jr.  
Rupp, G. H.  
Stout, D. A.  
**Ravenwood.**—Thompson, S. M.  
**Rico.**—Bonnemort, R. J.  
**Rifle.**—Blitz, R. S.  
**Rollinsville.**—  
Burlingame, W. E.  
**Silverton.**—De Beque, G. R.  
Morgan, D. A.  
**Trinidad.**—Charles, I. M.  
**Victor.**—Jones, F.  
Tippet, J. M.  
**Walsen.**—Jackson, R. A.  
Turner, E. G.  
**West Portal.**—Gentry, G. G.

# CONNECTICUT

**Ansonia.**—Butterbaugh, H. W.  
Hilton, A. F.  
Hook, I. T.  
**Branford.**—Bradley, C. I.  
Hammer, A. E.  
Jameson, A. H.  
**Bridgeport.**—Chatfield, C. H.  
Christie, J. L.  
Clark, W. R.  
Dietz, C. F.  
Ferry, C.  
Ford, A. P.  
Hadley, E. C.  
Leach, R. H.  
Lewis, C. F.  
Morris, A.  
Patterson, M. W.  
Senior, S. P., Jr.  
Webster, W. R.  
**Bristol.**—Holmquist, G. F.  
**Danbury.**—Beard, J. T.  
**East Berlin.**—Dalbey, G. E.  
**Greenwich.**—Allen, J. H.  
Newton, F. C.  
**Hartford.**—Keeney, R. M.  
May, A. E.  
Rockwell, S. P.  
Simpson, R. E.  
Tamor, D.  
**Litchfield.**—Blake, F. H.  
Howe, E.  
Munroe, H. S.  
**Marion.**—Crampton, D. K.  
**Meriden.**—Egeberg, B.  
Gerner, G. C.  
Peck, N. C.  
Smith, H. B.  
**Naugatuck.**—Highriter, H. W.  
**New Britain.**—Crum, B. M.  
**New Haven.**—Bateman, A. M.  
Behre, H. A.  
Bellinger, H. P.  
Davoll, D. P.  
Gravely, J. S.  
LeClercq, R. R.  
Mathewson, C. H.  
McKeehan, L. W.  
Metcalf, S. B.  
Milligan, W. E.  
Phillips, A.  
Russell, W. L.  
Solakian, H. N.  
Warner, R. K.  
Young, D.  
**New London.**—Davison, G. C.  
**Norfolk.**—Carlisle, G. L., Jr.  
**Norwalk.**—McMahon, F. J.  
**Seymour.**—Clapp, L. R.  
Merriman, T. C.  
Rule, F. C.  
**Shelton.**—Young, R. S.  
**Southport.**—Hood, B. B.  
**Stamford.**—Horne, J. A.  
**Stratford.**—Collingwood, C. B.  
Willey, O. G.  
**Torrington.**—Pierson, H. L.  
**Wallingford.**—Canby, R. C.  
Lee, A. H.  
**Waterbury.**—Bassett, W. H.  
Bassett, W. H., Jr.  
Bedworth, H. A.  
Bradley, J. C.  
Coe, H. W.  
Coe, J. A.  
Croft, H. P.  
Davis, A. L.  
Davis, C. H.  
Girvin, W. S.  
Goss, E. O.  
Hibbard, W. R.  
Hull, D. R.  
Jennison, H. C.  
Kemp, J. T.

# Waterbury.—Continued.

Meyer, F. N.  
Phillips, A. J.  
Price, W. B.  
Rippere, W. H.  
Schmid, C. F.  
Smith, C. S.  
Smith, F. G.  
Thelin, L. W.  
Thompson, H. L.  
Vose, C., Jr.  
Wallace, H. M.  
Weiser, F. S.  
Weidman, R. S.  
**Westport.**—Baker, J. A.  
Dalen, O.  
Staples, E. E.  
Staritzky, E.  
Stedman, W. A.  
Williams, J. C.

# DELAWARE

**Henry Clay.**—Tanberg, A. P.  
**Newport.**—Hayward, J. W.  
Krebs, A. S.  
Saguine, W., Jr.  
**Wilmington.**—Burdick, C. L.  
de Medio Serrano, R.  
du Pont, T. G.  
Forster, A. E.  
Greensfelder, N. S.  
Harding, P. O.  
Holtz, J.  
Hurter, C. S.  
Marvin, T.  
Pryer, W. C.  
Sanders, M. T.  
Saville, J. H.  
Smith, C. C.  
Smith, J. H., Jr.  
Spruance, W. C.  
Street, G. B.  
Torell, T.  
Trumball, R. C.  
Weisenburg, A.

# DISTRICT OF COLUMBIA

**Washington.**—Adair, A. C.  
Adkerson, J. C.  
Angell, W. R.  
Atherholt, G. M.  
Atkinson, L. W.  
Balderson, V. W.  
Ballard, P. A.  
Barwick, A. R.  
Bateson, C. E. W.  
Berry, W. J.  
Bowles, O.  
Brodie, W. M.  
Brown, W. N.  
Burchard, E. F.  
Burgess, G. K.  
Callbreath, J. F., Jr.  
Campbell, M. R.  
Campbell, T. E.  
Cattell, R. A.  
Cochran, I. C.  
Collier, A. J.  
Cook, W. L.  
Corse, W. M.  
Cottrell, F. G.  
Craigue, W. H.  
Darton, N. H.  
Davis, J. A.  
Dean, R. S.  
Delano, F. A.  
Donahoe, F. T.  
Douglas, L. W.  
Dowdell, R. L.  
Durell, C. T.  
Fawcett, L. H.



## Washington.—Continued.

Penner, C. N.  
 Ferguson, H. G.  
 Fieldner, A. C.  
 Franchot, R.  
 Franklin, N.  
 Freeman, J. R., Jr.  
 Furness, J. W.  
 Gandy, H. L.  
 Gibson, L. C.  
 Goldbeck, A. T.  
 Goodner, I. E.  
 Grant, R. J.  
 Gregory, F. C.  
 Griggs, C. C.  
 Grimes, J. A.  
 Grodsky, V. A.  
 Groesbeck, E. C.  
 Harrington, D.  
 Harrison, W. H.  
 Hatchett, S. P.  
 Hedges, J. H.  
 Henderson, E. P.  
 Hess, F. L.  
 Hewett, D. F.  
 Hood, O. P.  
 Howell, S. P.  
 Jackson, C. F.  
 Johnston, W. D., Jr.  
 Julihn, C. E.  
 Katz, F. J.  
 Kiessling, O. E.  
 Knapp, I. N.  
 Lawrie, H. N.  
 Lee, F. W.  
 Leonard, F. M.  
 Livingston, I.  
 Loughlin, G. F.  
 Lyon, G. J.  
 Mansfield, G. R.  
 Margerum, C. E.  
 Marshall, S. B.  
 McCall, M. C.  
 McCorken, E. P.  
 Mendenhall, W. C.  
 Merrill, C. W.  
 Miller, J. C.  
 Miser, H. D.  
 Moffit, F. H.  
 Morris, H. C.  
 Munroe, C. E.  
 Nevius, J. N.  
 Nolan, T. B.  
 Oberle, A.  
 Oddie, T. L.  
 Page, W. N.  
 Paige, S.  
 Pardee, J. T.  
 Potter, E. C.  
 Price, D. J.  
 Rawdon, H. S.  
 Rice, G. S.  
 Richardson, G. B.  
 Ross, C. P.  
 Sayers, R. R.  
 Schaller, W. T.  
 Schrader, F. C.  
 Sears, M. A.  
 Sears, S. C.  
 Smith, G. O.  
 Smith, H. I.  
 Smith, P. S.  
 Spencer, A. C.  
 Spencer, H. B.  
 Stabler, H.  
 Stanford, H. R.  
 Steiger, G.  
 Sterrett, D. B.  
 Tait, G. M. S.  
 Taylor, R.  
 Thoenen, J. R.  
 Tryon, F. G.  
 Turner, S.  
 Tyler, P. M.

## Washington.—Continued.

Ulmer, J.  
 Van Orstrand, C. E.  
 Van Sieten, M.  
 Vorfeld, R. H.  
 Wagner, W. H.  
 Walker, M. R.  
 Wesley-Smith, S. C. L.  
 White, D.  
 Winslow, F.  
 Wright, C. W.  
 Wright, F. E.  
 Wroth, J. S.  
 Zimmermann, A. G.

## FLORIDA

Bartow.—Lawrence, H. M.  
 Pamplin, J. W.  
 Brewster.—Mead, H. L.  
 Daytona Beach.—Merrill, I. L.  
 Wilson, G. B.  
 Frostproof.—Keenan, E. T.  
 Jacksonville.—Buzby, A. D.  
 Miami Beach.—Kraemer, F. J.  
 Miami.—Panting, J. A.  
 Stimson, L. A.  
 Nichols.—Kelly, L. W.  
 Pensacola.—Graham, E. R.  
 Pensacola.—Tregoning, R. A.  
 Quincy.—Hopkins, R. H.  
 St. Petersburg.—Deane, E. G.  
 Tallahassee.—Ponton, G. M.  
 Tampa.—Smith, J. E.  
 Tarpon Springs.—  
 Darlington, W.  
 Venice.—Messinger, F.  
 Zellwood.—Guise, M. H.

## GEORGIA

Atlanta.—Dunn, T. S.  
 Hall, B. M.  
 Smith, R. W.  
 Walters, G. D.  
 Dahlonega.—Short, W. I.  
 Dry Branch.—Morgan, E. G.  
 Gainesville.—Westervelt, E. W.  
 Lithonia.—Severinghaus, N.  
 Poulton.—Osborn, C. S.  
 White.—Flanagan, V. E.

## HAWAII

Honolulu.—Castle, S. N.

## IDAHO

Bellevue.—Rockwell, I. E.  
 Bernard.—Gwinn, J. W.  
 Boise.—Atkinson, S. K.  
 Bell, R. N.  
 Campbell, S.  
 Eldridge, J. B.  
 Hill, W. H.  
 Kennedy, F. A.  
 Morris, W. R.  
 Oberbillig, J. J.  
 Smith, G. C.  
 Wahl, A. J.  
 Burke.—Foreman, C. H.  
 Vincent, W. P.  
 Coeur d'Alene.—Gray, J. P.  
 Zwicky, W. E.  
 Conda.—Norris, E. M.  
 Elk City.—Kleesattel, R.  
 Idaho Falls.—Lundberg, J., Jr.  
 Kellogg.—Barnwell, L. R.  
 Beasley, A. F.  
 Bitner, W. H.  
 Claggett, W. H.  
 Dean, R. L.  
 Dunn, R. H.

## Kellogg.—Continued.

Easton, S. A.  
 Garber, C. Y.  
 Haeseler, A. E.  
 Handy, R. S.  
 Huefner, O. A.  
 Jasberg, O. J.  
 Johnson, T. L.  
 Jorgensen, M. A.  
 Kashin, G. L.  
 Labarthe, W. A.  
 Miller, R. M.  
 Mulliken, A. E.  
 Popoff, G. C.  
 Quiner, J. H.  
 Rowen, R. W.  
 Woolf, W. G.  
 Masonia.—Masson, D. L.  
 Montpelier.—Taylor, J. J.  
 Moscow.—Albertson, F. E.  
 Fahrenwald, A. W.  
 Hite, T. H.  
 Jenkins, F.  
 Kirkham, V. R. D.  
 McKinley, H. L.  
 Small, C. E.  
 Staley, W. W.  
 Mullan.—Cartwright, C. K.  
 Coumerilh, W.  
 Greenough, W. E.  
 Haug, E.  
 Nampa.—Babbitt, T. D.  
 Dewey, W. C.  
 Page.—Lavrov, S. E.  
 Parma.—Steel, A. A.  
 Payette.—Thurston, R. V.  
 Quartzburg.—  
 Burroughs, A. H., Jr.  
 Shaw, G. A.  
 Rose Lake.—Elstone, E. F.  
 Wallace.—Burbidge, F.  
 Day, H. L.  
 Day, H. L.  
 Day, J. J.  
 Donahoe, D. G.  
 Druding, F. D.  
 Evans, M.  
 Hall, W. J.  
 Marsh, H. W.  
 McCarthy, J. F.  
 Moore, S. R.  
 Newton, C. W.  
 O'Keeffe, E. C.  
 Olsson, O. A.  
 Platts, J. B.  
 Ramstedt, A. P.  
 Sabin, D. J.  
 Sorenson, R. E.  
 Washburn, H. G.  
 White, R. J.  
 Woolridge, B. P.  
 Zeigler, W. L.  
 Wardner.—Huseman, W. G.  
 Yellow Pine.—Abstein, H. T.  
 Bailey, H. D.  
 White, J. A.

## ILLINOIS

Alton.—Derrer, L. H.  
 Duval d'Adrian, A. L.  
 Ohnsorg, E. L.  
 Snell, L. W.  
 Sullivan, J. J.  
 Aurora.—Evans, C. E.  
 Belleville.—Brandenburger, W. O.  
 Elrod, W. H.  
 Knoebel, I. G.  
 Benton.—Lindsay, W. L.  
 Centralia.—Weir, P.  
 Chicago.—Affleck, B. F.  
 Albinski, S.  
 Allen, A.

## Chicago.—Continued.

Allport, H.  
 Anderson, C. H.  
 Anderson, R. O.  
 Andrews, C. W.  
 Arms, R. W.  
 Armstrong, F. H.  
 Axtell, W. O.  
 Banon, E. M.  
 Bastin, E. S.  
 Batchelder, W. O.  
 Bauman, E. R.  
 Bautz, R. A.  
 Beath, C. P.  
 Bendelari, A. E.  
 Billow, E. E.  
 Birkenstein, G.  
 Boynton, A. J.  
 Brassert, H. A.  
 Breckinridge, G. C.  
 Brookby, H. E.  
 Buchanan, D. W.  
 Buchanan, G.  
 Buffington, E. J.  
 Bull, R. A.  
 Carpenter, A. H.  
 Chalmers, W. J.  
 Clark, F. E.  
 Colwell, D. L.  
 Copeland, F. W.  
 Coulson, D. C.  
 Counsellman, T. B.  
 Danforth, G. L., Jr.  
 Davidson, G. M.  
 Davis, J. C.  
 Davis, P. H.  
 Day, R. O.  
 Devereux, A.  
 DeWald, L. H.  
 Dutton, C. B.  
 Egloff, G.  
 Eliot, E. L.  
 Fabian, F. G.  
 Fahrenwald, F. A.  
 Farnham, S. W.  
 Ferreira, E. C.  
 Fisher, D. J.  
 Fletcher, J. H.  
 Foss, M. H.  
 Freyn, H. J.  
 Gahagen, S. M.  
 Garcia, J. A.  
 Geither, E. C.  
 Gennet, C. W., Jr.  
 Gilmore, L. E.  
 Green, A. C.  
 Greenlee, W. B.  
 Gyss, E. E.  
 Haines, C. J.  
 Hamernik, F. J.  
 Hamilton, A. K.  
 Hamilton, A. L.  
 Hardy, J. W.  
 Harmon, B. G.  
 Harrington, G. B.  
 Harris, S.  
 Hawks, H. D.  
 Hayden, C. T.  
 Hollis, H. L.  
 Hoover, H. E.  
 Hoover, R. P.  
 Hoskin, A. J.  
 Hoskins, W.  
 Hotchkiss, H.  
 Hulse, A. J.  
 Hunter, F. M.  
 Hynes, D. P.  
 Jackman, E. T.  
 James, R. H.  
 Jameson, A. S.  
 Jennings, A. Z.  
 Johann, H. A.  
 Johnston, I. H.  
 Jones, G. H.  
 Just, E.

## Chicago.—Continued.

Kanter, J. J.  
 Kennedy, R. E.  
 Kinney, C. L., Jr.  
 Kinney, S. P.  
 Kirby, W. K.  
 Kirkpatrick, R. R.  
 Klepinger, J. H.  
 Knowles, A. S.  
 Ladoo, R. B.  
 Landry, G. A.  
 Lange, H. O.  
 Larimer, J. I.  
 Lednum, E. T.  
 Leiter, J.  
 Leslie, E. H.  
 Livingston, L.  
 Lukens, F. M.  
 Mabrey, R.  
 MacDowell, C. H.  
 Machamer, J. E.  
 MacKenzie, W. J.  
 Maccomb, J. de N.  
 March, A. T.  
 Mathesius, W.  
 McCall, S. T.  
 McCullough, H. W.  
 McFadden, G. C.  
 McKee, W. S.  
 McMahon, G. F.  
 Mead, D. H.  
 Mekler, L. A.  
 Menshih, N. N.  
 Milano, L.  
 Mills, E. S.  
 Miner, H. H.  
 Monroe, W. S.  
 Moorshead, A. J.  
 Morrison, M.  
 Munn, J. F.  
 Nibecker, K.  
 Nichols, H. W.  
 Noe, A. C.  
 North, M. S.  
 Osland, E.  
 Parker, H. A.  
 Peabody, S.  
 Peltier, M. F.  
 Pietsch, P. H.  
 Piez, C.  
 Randall, C. B.  
 Remmers, W. E.  
 Richardson, S. A.  
 Roberts, K.  
 Roberts, R. T.  
 Roberts, W. R.  
 Robinson, T. W.  
 Rockwood, N. C.  
 Rollin, G. W.  
 Ruhm, H. D.  
 Schagrin, H.  
 Schapiro, L.  
 Scheuch, W. A.  
 Schonthal, B. E.  
 Schultz, L. C.  
 Scott, J. W.  
 Seager, O. A.  
 Seifert, E. F.  
 Seydler, F. K.  
 Sheaffer, T.  
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 Hyde, A. D.  
 Jewett, F. G.  
 Joseph, T. L.  
 Longyear, E. J.  
 Longyear, R. D.  
 Park, C. F., Jr.  
 Parker, W. H.  
 Prather, H. P.  
 Robinson, C. H.  
 Ruhnke, D. H.  
 Smith, C. W.  
 Sodoma, J.  
 Stauffer, C. R.  
 Wade, H. H.  
 Warren, F. M.  
**Mountain Iron.—Bergstrom, F. S.**  
**Nashwauk.—Siebenthal, T. E.**  
**St. Paul.—Butler, W.**  
 Clarke, H.  
 Kindler, H. A.  
 Knickerbocker, A. K.  
 Newman, L. D.  
 Ott, L. E.  
 Rathjens, G. W.  
 Sides, C. E.  
**South Hibbing.—Barber, M. H.**  
**Virginia.—Coleman, M. W.**

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 Briggs, C. H.  
 Delano, L. A.  
 Hitchcock, C. K.  
 Isbell, W. T.  
 Marsh, C.  
 Neill, R. B.  
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 Neustaedter, H. A.  
 Steinmesch, J. H.  
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**Ferguson.—Thatcher, T. H., Jr.**  
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 Rankin, J. J.  
 Warner, C. M.  
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 Walker, A. E.  
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 Butler, P. B.  
 Calbeck, J. H.  
 Clark, G. L.  
 Clinch, W. D.  
 Cowpland, E. M.  
 Dike, C. F.  
 Ellis, E. Y.  
 Fowler, G. M.  
 Haley, D. F.  
 Hallows, R. L.  
 Hollman, E. G.  
 Koelker, K. L.  
 Lennan, T. F.  
 Loveman, M. H.

**Joplin.—Continued.**

Lyden, J. P.  
McColgin, L. H.  
Netzeband, W. F.  
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Rakowsky, V.  
Ruhl, O.  
Stewart, W. M.  
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Wallower, F. C.  
Weeks, F. E.

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Eulich, A. V.  
Farmer, I. W.  
Harkes, W.  
Longstreth, B.  
Marsters, V. F.  
Taylor, H. B.  
Warner, E. E.

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Weigel, W. W.

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Haines, P. A.  
Moore, J. P.  
Patten, E. B.  
Stockett, N. A.

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Clayton, C. Y.  
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Coghill, W. H.  
Couch, W. L.  
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DeVaney, F. D.  
Farrar, W.  
Forbes, C. R.  
Fulton, C. H.  
Hanley, H. R.  
Howes, W. L.  
Hubbard, C. R.  
Knickerbocker, R. G.  
Layne, M. B.  
McQueen, H. S.  
Murphy, T. D.  
Rifat, F.  
Walsh, D. F.

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Dresser, C. G.  
Whaley, G. C.

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Barrell, R. W.  
Block, H. W. C.  
Bousquet, L. R. G.  
Brewster, T. T.  
Buchner, C. F.  
Campbell, J. H.  
Carpenter, G. O.  
Case, W. B.  
Caselton, J. A.  
Chivvis, N.  
Corner, D. C.  
Cuno, C. W.  
Curran, M. D.  
Davis, W. F.  
Desparois, L. J., Jr.  
Erwin, R. W.  
Forgotson, J. M.  
Forman, P. G.  
Gartside, A. E.  
Gatch, E. S.  
Gazzam, J. P.  
Gerhard, J. W.  
Green, F. W.

**St. Louis.—Continued.**

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Grosberg, A.  
Haggenjos, J.  
Jenkins, W. J.  
Kavanaugh, W. K.  
Lintner, E. J.  
Lumaghi, O. L.  
Mahaffey, B. O.  
Mancha, R.  
McCallum, J.  
McCourt, W. E.  
McMillan, A. S.  
Meier, A. J.  
Meyer, J. P.  
Moore, P. N.  
Morrissey, G. A.  
Morrison, F. G.  
Noble, G. W.  
O'Brien, J. R.  
Pfautz, C. Y.  
Potter, H.  
Robertson, J. D.  
Robinson, E. G.  
Rollin, G. S.  
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Summer, R. H.  
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Thacher, A.  
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Toenges, A. L.  
Turnbull, L. A.  
van Holst Pellekaan, W.  
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Wolferesperger, J. J.  
Yates, J. L.

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H. M.

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Craven, G. W.  
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Evans, L. O.  
Frink, L. D.  
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Gidel, M. H.  
Gilbert, F. C.  
Gillie, J.  
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Gow, P. A.  
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Guck, I. A.  
Hard, H. W.  
Hayward, H. L.  
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Hogan, E. N.  
Howard, V.  
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Landon, R. E.  
Leggat, A.  
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Longley, A. L.  
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McDonald, A. M.  
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Morris, F. T.  
Norris, G. E.  
O'Kelly, W. A.  
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Rahilly, H. J.  
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Sales, R. H.  
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**Dewey, G. C.**  
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**Zimmerman, A. A.**  
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**d'Ablain, P. R.**  
**Dallmus, E. G.**  
**Nesbitt, R. W.**  
**Prescott, H. T.**  
**Smith, J. F.**  
**Wiggin, A. E.**  
**Wilson, R. W.**



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 Skeels, F. H.  
 Sveshnikoff, A. P.  
 Jardine.—Bacorn, H. C.  
 Livingston.—Sacket, C. T.  
 Marysville.—Brown, S. A.  
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 Walters, R. E.  
 Nelhart.—Hayes, D. I.  
 Maury, J. L.  
 Phillips.—Phillips, W. W.  
 Polson.—Nash, H. F.  
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 Shelby.—Platt, F. C.  
 Schwabrow, J. R.  
 Troy.—DeBorde, L.  
 Powers, J. F.  
 Virginia City.—Garrison, R.

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 Gonser, B. W.  
 Lebedeff, Y. E.  
 McAuliffe, E.  
 Reinbold, H.  
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 Wallace.—Spencer, L. C.

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 Cortez.—Greenan, J. O.  
 East Ely.—Smith, A.  
 Ely.—Millard, F. W.  
 Young, L. R.  
 Gilbert.—McLachlan, D. G.  
 Goldfield.—D'Arcy, A. I.  
 Lawry, A. H.  
 Goodsprings.—Yundt, L. D.  
 Jarbidge.—Park, J. F.  
 Kimberly.—Cameron, J. D.  
 Cook, C. I.  
 Douglass, W. C.  
 Haffner, J. B.  
 Pennebaker, E. N.  
 Rott, E. H., Jr.  
 Las Vegas.—Wilson, J. W.  
 Manhattan.—Fancher, W. J.  
 McGill.—Buchella, F. H.  
 Immonen, L. G.  
 Jardine, F. M.  
 Lakenan, C. B.  
 Larson, L.  
 O'Carroll, H. J.  
 Pesout, E.  
 Skeahan, T. J.  
 Midas.—Warnken, L., Jr.  
 Mill City.—Heizer, O. F.  
 Pioche.—Janney, J.  
 Thomas, L. G.  
 Reno.—Carpenter, J. A.  
 Doerner, H. A.  
 Fulton, J. A.  
 Gianella, V. P.  
 Hardy, R. A.  
 Jones, J. C.  
 Lain, J. B.  
 Leaver, E. S.  
 Palmer, W. S.  
 Rives, H. M.  
 Schrader, E. J.

## Reno.—Continued.

Smyth, W. I.  
 Vanderburg, W. O.  
 Woolf, J. A.  
 Zaruba, J. A.  
 Ruth.—Larsh, W. S.  
 Scherer, M. C.  
 Willcox, J. E.  
 Tonopah.—Bradshaw, F.  
 Hart, J. P.  
 Henricksen, R.  
 Johnson, D. S.  
 Kirchen, J. G.  
 Richardson, W. V.  
 Silver, A.  
 Yerington.—King, E. W.

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Claremont.—Kingdon, F. H.  
 Letchworth, P. E.

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 Bayonne.—Ackerman, D. E.  
 Coyle, F. B.  
 Fraser, O. B. J.  
 Kihlgren, T. E.  
 Pilling, N. B.  
 Sands, J. W.  
 Wheeler, E. S.  
 Wise, E. M.  
 Wood, T. J.  
 Belleville.—Moiles, E. D.  
 Bloomfield.—Beliaeff, S. S.  
 Brown, W. T., Jr.  
 Gero, W. B.  
 Little, J. M.  
 Ramage, J. H.  
 Bloomingdale.—Donald, W.  
 Bound Brook.—Fischer, C. J.  
 G.  
 Linville, C. P.  
 Burlington.—Langenberg, F.  
 C.  
 Russell, N. F. S.  
 Camden.—Cook, W. E.  
 Carteret.—Aldrich, C. H.  
 del Rio, S.  
 Gayley, H. C.  
 Green, H. M.  
 Holder, G. C.  
 Jones, T. R.  
 Kiil, E.  
 Meissner, C. E.  
 Merrill, M. W.  
 Rolle, S.  
 Smith, W. S.  
 Warford, N. L.  
 Convent.—Robinson, E. M.  
 Dover.—Moore, S. B.  
 Roche, H. M.  
 Sturtevant, T. F.  
 Williams, T. M.  
 East Orange.—Cottee, C. H. F.  
 O'Brien, D. F.  
 Simonson, E. H.  
 Elizabeth.—Carroll, A. W.  
 Colbert, C. L.  
 Cox, D. J.  
 Deacon, R. W.  
 Jernakoff, M. A.  
 Reichert, W. G.  
 Spencer, A. C., Jr.  
 Staples, H. A.  
 Wheeler, L. F.  
 Franklin.—Catlin, R. M.  
 Evans, W. F.  
 Haight, C. M.  
 Robertson, W. G.  
 Rowe, G.  
 Schurman, G. W.  
 Shuster, E. D.  
 Skokan, G. P.  
 Tillson, B. F.

## Franklin.—Continued.

Watt, A. G.  
 Garwood.—Johnston, R. L.  
 Newhall, H. B.  
 Pleister, H. W.  
 Rollason, G. M.  
 Glen Ridge.—Fay, A. H.  
 Rich, H. W.  
 Harrison.—Allan, A., Jr.  
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 Duck, F. J. G.  
 Merritt, C. G.  
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 Hall, J. H.  
 Hanks, G. R.  
 Hohokus.—Preston, V.  
 Hopewell.—Labaw, J. P.  
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 Fischer, G. H.  
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 Davenport, E. S.  
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 Taylor, F. T.  
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 Carter, F. E.  
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 Davis, F. W.  
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 Schweizer, E.  
 Semple, R. A.  
 von Seyfried, R.  
 Waitenberg, R. G.  
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 Palisades Park.—Guffanti, A.  
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 Putman, N. C.  
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 Reinoso, E. A.  
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 Spilsbury, H. G.  
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 Miller, S.  
 So. Plainfield.—Spicer, C. W.  
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 Crossley, G. C.  
 Focht, L.  
 Hall, C. W.  
 Helm, R. C.  
 Johnson, M. E.  
 Lawton, L. H.  
 Roebling, F. W., Jr.  
 Roebling, S.  
 Scammell, M. J.  
 Suverkrop, E. A.  
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Upper Montclair.—Stehli, H. J.  
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 Warren Point.—Tassier, A. H.  
 Watchung.—Moldenke, R.  
 Moldenke, R., Jr.  
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 West Orange.—Parsons, I. H.  
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 Wharton.—VanValkenburgh, R. R.  
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 Strand, K. A.  
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 Socorro.—Emerick, W. L.  
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 Martin, J. S.  
 Reed, R. MacA.  
 Walter, A. S.  
 Weir, J. A.  
 Wells, E. H.  
 Wootton, T. P.  
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 Robertson, N. F.  
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 Smith, S. L.  
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 Wood, R. U.  
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 Boeck, J. W.  
 Burke, T. H. D.  
 Comstock, J. R.  
 Donner, W. H.  
 Frankel, S.  
 Hildreth, T. F.  
 Hoover, D. A.  
 Jarvis, E. G.  
 Kunigonis, S. J.  
 Meloon, N. W.  
 Merrill, A.  
 Nash, W. H.  
 Patch, N. K. B.  
 Rodgers, W.  
 Schloss, J. M.  
 Schureman, C. B.  
 Sherman, P. B., Jr.  
 Sweet, A. J.  
 Wilke, W.  
 Williams, R. V.  
 Zeller, H. P.  
 Buskirk.—Granger, H. G.  
 Cairo.—Pfordte, O. F.  
 Carmel.—Rogers, O. P.  
 Catskill.—Jones, R. W.  
 Cazenovia.—Burden, H. H.  
 Center Moriches.—Matteson, W. G.  
 Clarence Center.—Thomas, J. A.  
 Colliersville.—Newton, C. E.  
 Corning.—Sullivan, E. C.  
 Willis, S. L.  
 Crown Point.—Thomas, M. L.  
 Cuylerville.—Fetherston, J. T.  
 Dobbs Ferry.—Tyssowski, J.  
 Dolgeville.—Vozel, F. A.  
 Douglaston.—Mack, E. L.  
 Edwards.—Fitzhugh, E. F.  
 Elmira.—Swift, F. G.  
 Flushing.—Farish, F. G.  
 Mitchell, J. M.  
 Forest Glen.—LeFevre, S.  
 Forest Hills.—Mandell, A. J.  
 Gloversville.—Kasson, B. Z.  
 Hamilton.—Whitnall, H. O.  
 Highland Falls.—Rigby, W. A.  
 Hudson.—Schmucker, R. A.  
 Ithaca.—Jones, V. E.  
 Nevin, C. M.  
 Ries, H.  
 Trainer, D. W., Jr.  
 Tuck, E.  
 Jackson Heights.—Corson, M. G.  
 Jamaica.—Apgar, F. W.  
 Jamestown.—Cummings, L. A.  
 Lackawanna.—Miller, H. H.  
 Laurel Hill.—Clark, C. W.  
 Corwin, F. R.  
 Drapeau, J. E., Jr.  
 Fink, A. A.  
 Fitzpatrick, E.  
 Harloff, C. S.  
 McKnight, H. S.  
 Waltien, R. R.

**Lockport.**—Feild, A. L.

Howard, L. E.

Kingsley, P. S.

Potts, A. D.

Wilson, E. F.

**Locust Valley.**—Charles, A. J.**Long Island City.**—Blackburn,

A. R.

Crafts, W.

Degnan, R. E.

George, H. S.

Kinzel, A. B.

MacQuigg, C. E.

Miller, W. B.

St. John, A.

Sullivan, A. P.

**Lyon Mountain.**—Linney, J. R.**Massena.**—Mairs, E. D.

Stickley, G. W.

Whitzel, R. T.

**Middletown.**—Rodgers, A. M.**Millbrook.**—Tower, J. T., Jr.**Mineville.**—Cummings, A. M.

Myners, T. F.

**Mount Kisco.**—Selchow, D. H.**Mt. Vernon.**—Beyer, D. C.

Griffen, J. D. M.

Wilde, F. L.

**New Rochelle.**—Spurr, J. E.**New York.**—Abbey, R. G.

Adams, H.

Adams, H. H.

Agar, W. M.

Agnew, G. B.

Aguerrevere, P. I.

Agureeff, I. G.

Ahlqvist, H.

Aisenberg, V. V.

Albin, L. D.

Aldridge, W. H.

Aldridge, W. V.

Alexander, J.

Allen, A. W.

Allen, J. W.

Allen, R. H.

Alley, J. C.

Altio, K. F.

Amy, E. J. H.

Anderson, J. H.

Anderson, J. P.

Andresen, J. H.

Andrews, A. D.

Apolant, S. L.

Argabrite, W. G.

Armitage, P.

Armstrong, P. A. E.

Arnold, C. E. Le N.

Atkinson, G.

Atwater, R. M., Jr.

Austin, A. M.

Ayer, C. F.

Bacon, M. W.

Bacon, R. F.

Baekeland, G.

Bagaeff, N. Z.

Bain, H. F.

Baker, C. L.

Baker, N. E.

Baldwin, I. W.

Ball, S. H.

Banister, R. T.

Banks, H. P.

Banks, J. H.

Baragwanath, J. G.

Barbour, P. E.

Barker, H. A.

Barnett, M.

Barnum, W.

Barrington, W. D.

Bartholomew, G. P.

Baxter, J. C.

Beatty, A. C.

Beck, E. A.

Becket, F. M.

Beers, A. D.

**New York.**—Continued.

Bell, H. S.

Bell, J. G.

Bellinger, H. C.

Benedict, W. DeL.

Benson, H. J.

Bensusan, K. E.

Bereslavsky, E. V.

Berger, W. F. B.

Berkey, C. P.

Bernard, C. P.

Berry, E. S.

Bethge, H. W.

Bevan, J. G.

Birch, S.

Bird, R. M.

Blake, H. E.

Blaut, S. J.

Blauvelt, W. H.

Bleekman, J. E.

Blonsky, G. B.

Bob, C. V.

Boericke, W. F.

Bohlin, H. G.

Bohn, C. A.

Bonardi, J. P.

Borchardt, W. O.

Borg, J.

Bowen, C. F.

Bowman, C. H.

Boyd, H. E.

Braden, S.

Braden, W.

Bradley, L.

Braid, A. F.

Bregman, A.

Brennon, J. C.

Breyer, F. G.

Bridgman, G. T.

Brinker, A. C.

Brobeil, F. J.

Brokaw, A. D.

Bronson, E. B.

Brooks, R.

Brosky, A. F.

Brown, D. C.

Brown, D. Q.

Brown, E. W.

Brown, J. S.

Brown, T. E., Jr.

Brown, T. F.

Brown, W. L.

Brown, W. S.

Browne, de-C.

Browne, D. G.

Brownell, F. H.

Browning, P. D.

Bryan, B.

Buck, L. J.

Buck, V. B.

Bucky, P. B.

Buford, J. S., Jr.

Buker, H. W.

Bull, I. C.

Rullwinkel, J. T.

Burbridge, C. E., Jr.

Burdick, C. A.

Burgess, J. A.

Burgess, L.

Burr, G. A.

Burwell, W. H.

Butler, R. G.

Cabot, J., Jr.

Caine, M. A.

Callow, J. M.

Cameron, W. M.

Campbell, W.

Cantley, C. L.

Carney, F. D.

Carr, H. J.

Case, A. H.

Cebrat, P.

Chadbourne, H. W.

Chadbourne, W. A.

Chadwick, L. R.

**New York.**—Continued.

Chaffin, C. E.

Channing, J. P.

Chapman, G. A.

Chapman, I. A.

Chase, M. F.

Child, R. S.

Church, J. A., Jr.

Clapp, F. G.

Clark, B. F., Jr.

Clark, C. W.

Clark, E. H.

Clark, F. H.

Cohen, F. W.

Colcord, F. F.

Collins, C. H.

Collins, F. W.

Colony, R. J.

Comstock, C. W.

Cone, J. J.

Conover, J. D.

Cooley, J. W.

Cooper, H. L.

Corbet, E. B.

Corbett, C. S.

Corey, W. E.

Cornell, I. H.

Cornell, R. T.

Corning, F. G.

Coryell, H. N.

Cotter, J. J.

Cotton, J. B.

Cousins, G. T.

Coutant, J. G.

Cox, B. B.

Cox, W. R.

Crandall, R.

Crane, C. H.

Cranston, R. E.

Crawford, C. A.

Crites, J.

Crone-Aamot, O.

Croston, J. J.

Crumbaugh, J. J.

Cullinan, C. F.

Cunninghame, A.

Dahlstrom, E.

Daly, M.

Dana, E. L.

Darby, G. M.

Darnell, J. L., Jr.

Davies, J. V.

Davis, H. G.

Davis, L. K.

Davis, W. W.

Dawson, E. H.

Decker, S. M.

de Golyer, A. G.

DeGolyer, E.

de Hora, M. H.

de Lima, O.

del Giudice, G. R. M.

Denison, C. L.

Denton, T. C.

Deppé, W. P.

de Saulles, C. A. H.

Devereux, J. H.

Devereux, W. B.

Dickerman, W. C.

Dickson, R. B.

Dickson, W. S.

Diecks, A. N.

Dillon, J. R.

Dinkey, C. E., Jr.

Dixon, A. F.

Dodge, C. E.

Dodge, H. E.

Dolbear, S. H.

Donnelly, L. G.

Donnelly, T. F.

Dorr, J. V. N.

Dougan, L. D.

Douglas, A.

Douglas, W.

Downes, F. A.



## New York.—Continued.

Downs, C. R.  
 Drew, C. V.  
 Dubi, J. H.  
 Duce, J. T.  
 Duggleby, A. F.  
 Durkee, A. E.  
 Dwight, A. S.  
 Dwyer, R. E.  
 Eagle, H. Y.  
 Eagles, H. M.  
 Easley, G. A.  
 Edeleanu, L.  
 Edwards, J. I.  
 Eilers, K.  
 Eilers, K. F.  
 Eldred, B. E.  
 Eliot, W. G.  
 Elkan, B.  
 Ellis, E. E.  
 Ellis, W. C.  
 Ely, F. B.  
 Emerson, H.  
 Emlaw, H. S.  
 Endweiss, J. A.  
 Erdlets, J. F. B., Jr.  
 Erdofy, M. E.  
 Estabrook, E. L.  
 Estep, F. L.  
 Ettlinger, I. A.  
 Eurich, E. F.  
 Evans, W. S.  
 Farish, G. E.  
 Farrell, J. A.  
 Fedoroff, V.  
 Fernald, H. B.  
 Field, B. E.  
 Findley, A. I.  
 Fink, C. G.  
 Finkeldey, W. H.  
 Finlay, J. R.  
 Fischer, A. H.  
 Fisher, A.  
 Fisher, T. E.  
 Fitzgerald, J. M.  
 Flanagan, J. M.  
 Fleming, E. P.  
 Fleming, H. S.  
 Fleming, M. C.  
 Flinn, A. D.  
 Fohs, F. J.  
 Fonville, H. A.  
 Foote, F. W.  
 Forbes, D. D.  
 Forbes, W. A.  
 Forman, H. B., Jr.  
 Forrest, G. M.  
 Forrester, W. A., Jr.  
 Fossorier, P. A.  
 Foster, P. L.  
 Fowler, A. A.  
 Francisco, F. L.  
 Fraser, A.  
 Fraser, G. C.  
 Free, E. E.  
 Furber, P. N.  
 Ganter, G. A.  
 Gardner, P. S.  
 Garthas, V. R.  
 Garlock, G. M.  
 Garner, A. H.  
 Geach, W.  
 Gentry, M. B.  
 Gerson, H. S.  
 Gill, P. L.  
 Gillespie, T. H.  
 Gillis, J. H.  
 Given, I. A.  
 Gobus, A.  
 Godley, G. M.  
 Gohn, G. R.  
 Goodhue, A. E.  
 Goodrich, C. C.  
 Goodrich, D. M.  
 Gordon, W. D.

## New York.—Continued.

Gould, K.  
 Gower, W. B.  
 Grace, W. R.  
 Grady, W. H.  
 Grant, W. M.  
 Graves, W. H., Jr.  
 Gray, W. A., Jr.  
 Green, H.  
 Greenawalt, J. E.  
 Greene, H. T.  
 Grine, H. A.  
 Gross, L. M.  
 Gruver, E. L.  
 Guess, H. A.  
 Guggenheim, D.  
 Guggenheim, E. A.  
 Guggenheim, H. F.  
 Guggenheim, S.  
 Guggenheim, S. R.  
 Guiterman, K. S.  
 Gurley, L. R.  
 Haldeman, G. T.  
 Hall, E. J.  
 Hall, J. H., Jr.  
 Hall, R. D.  
 Halvorsen, A. L.  
 Hamilton, C. W.  
 Hamilton, E. P.  
 Hamilton, F. E.  
 Hamilton, H. T.  
 Hamilton, J. W. H.  
 Hamilton, L. A.  
 Hammond, J. H.  
 Hanburger, F. W.  
 Hancock, H. D.  
 Handy, J. O.  
 Hanley, W. F.  
 Hardenbergh, W. P.  
 Harding, J. E.  
 Hardinge, H. W.  
 Hardy, C.  
 Hardy, J. G.  
 Harris, J. E.  
 Harris, L. V. D.  
 Harter, I.  
 Hasenochrl, V. F.  
 Hawkins, T. G., Jr.  
 Hayden, C.  
 Hayes, J. E.  
 Hayler, G. E., Jr.  
 Head, J. L.  
 Healey, P. J.  
 Hecht, H.  
 Heckscher, A.  
 Heidenreich, W. L.  
 Heimrod, A. A.  
 Heitzmann, J. A.  
 Heller, I. S.  
 Heller, M. J.  
 Hellmann, F.  
 Hellstrom, E. R. N.  
 Helprin, S. E.  
 Hemphill, J. S.  
 Henderson, H. P.  
 Henry, P. W.  
 Heroy, W. B.  
 Hewitt, E.  
 Higgins, E. P.  
 Hill, H. H.  
 Hishler, L.  
 Hitzrot, H. W.  
 Hixon, H. W.  
 Hochschild, H. K.  
 Hochschild, W.  
 Hoffman, P.  
 Hoffman, R. D.  
 Hoffmann, K. F.  
 Hoke, C. M.  
 Holderer, G. B.  
 Holmes, J. A., 2nd.  
 Holstein, L. S.  
 Honeyman, R. B.  
 Hood, K. K.  
 Hoover, H.

## New York.—Continued.

Hopkins, E. B.  
 Hough, D. L.  
 Howbert, Van D.  
 Howells, G. A.  
 Hoyt, H. S.  
 Hoyt, J. K., Jr.  
 Hoyt, J. T.  
 Hubbard, B.  
 Hubbard, W. H., Jr.  
 Hubbell, A. H.  
 Hughes, A. D.  
 Hukill, F. W.  
 Hulick, W. H.  
 Humphrey, G. S.  
 Hunt, R. C.  
 Huntton, L. D.  
 Huntzinger, C. L.  
 Hurley, J. J.  
 Hursh, R.  
 Hutchins, R. G.  
 Hyde, R. W.  
 Ibbett, A. W.  
 Ihseng, A. O.  
 Illinski, A. X.  
 Ince, C. R.  
 Ingalls, W. R.  
 Iredell, F. W.  
 Irvin, D. F.  
 Isakson, C. O.  
 Isom, E. W.  
 Jackling, D. C.  
 Jacob, W. P.  
 Jacobus, D. S.  
 James, A. C.  
 Janeway, J. H.  
 Jenison, H. A. C.  
 Jenkins, C. V.  
 Jennings, R. E. 2nd.  
 Johnson, E. M.  
 Johnson, L.  
 Johnston, A. W.  
 Jordan, W. L.  
 Josephs, I. S.  
 Jourdin, W. W.  
 Jowett, J. H.  
 Judson, W.  
 Kahn, W. B.  
 Kameros, S.  
 Kanowitz, S. B.  
 Karcher, J. C.  
 Karp, J. R.  
 Kay, F. H.  
 Keefer, T. G.  
 Keen, W. H.  
 Keene, A. F.  
 Keiser, H. D.  
 Kelley, C. F.  
 Kellogg, D. L.  
 Kelly, J. E.  
 Kelly, S. F.  
 Kendall, M.  
 Kenna, R. K.  
 Kennedy, E. J., Jr.  
 Kennedy, F. R.  
 Kennedy, J. E.  
 Kennedy, J. J.  
 Kent, F. J.  
 Kent, W. S.  
 Kern, E. F.  
 Kiddle, A. W.  
 Kihlstedt, F. H.  
 King, C. D.  
 Kinney, H. D.  
 Kirby, E. B.  
 Kissam, W. A.  
 Kissock, A.  
 Kittle, C. A.  
 Klahre, A. C.  
 Klopstock, P.  
 Klugescheid, R. C.  
 Knox, H. H.  
 Koby, J. A.  
 Koenig, R. P.  
 Konkoff, W. I.

## New York.—Continued.

Kraft, P.  
 Krebs, K.  
 Kreisinger, H.  
 Kruse, F.  
 Kunhardt, W. B.  
 Kunz, G. F.  
 Kursell, H. A.  
 Laist, F.  
 LaMond, N. E.  
 La Montagne, R. W.  
 Landis, W. S.  
 Langdon, P. H.  
 Lanza, A. J.  
 Larpenteur, B. J.  
 Lauer, H. H.  
 Lawrence, F. V.  
 Lawson, A. W.  
 Leary, D. F.  
 Leary, D. J.  
 Ledoux, L. V.  
 Lee, F. E.  
 Leggett, T. H.  
 Leonardon, E. G.  
 Levinger, D.  
 Lewis, A.  
 Lewis, J. V.  
 Lewis, W. B.  
 Lewisohn, A.  
 Li, K. C.  
 Liddell, D. M.  
 Lidgerwood, J. H.  
 Lihme, C. B.  
 Lilley, E. R.  
 Linch, H. A.  
 Lindberg, C. O.  
 Lindsey, J.  
 Littauer, S.  
 Little, A.  
 Livingstone, E. A.  
 Lloyd, R. L.  
 Loeb, C. M.  
 Loomis, E. E.  
 Loonam, A. C.  
 Lopez, V. M.  
 Lovejoy, J. M.  
 Low, B.  
 Lucas, F. F.  
 Lundberg, H. T. F.  
 Lury, A.  
 Lyman, F.  
 MacDonald, E. J.  
 MacFadden, C. K.  
 MacGinniss, J.  
 MacGregor, F. S.  
 Mackenzie, K. G.  
 Maier, H. R.  
 Mallory, P. R.  
 Malozemoff, A.  
 Manning, V. H.  
 Markle, J.  
 Marshall, A. E.  
 Marshall, S. M.  
 Marshall, W. H.  
 Masters, H. K.  
 Mathews, J. A.  
 Mathews, P. L.  
 Mattson, V. L.  
 Mauch, J. L.  
 Maust, E. J.  
 Maxwell, A. W.  
 Maxwell, M. W.  
 Mayer, L. W.  
 MAfee, D. S.  
 McClellan, R. S.  
 McClelland, J. F.  
 McClenahan, J. S.  
 McConnell, R. E.  
 McCreery, J. H.  
 McCrossin, E. F.  
 McDevitt, J. E.  
 McDonald, P. B.  
 McGovern, R. A.  
 McIlvain, E. M.  
 McKee, H. H.

## New York.—Continued.

McKinlay, W. B.  
 McKnight, C.  
 McNab, A. J.  
 McVittie, C. A.  
 Meagher, E.  
 Meissner, C. A.  
 Mentzel, C.  
 Mercer, J. W.  
 Meredith, W. F.  
 Merica, P. D.  
 Merriss, M. H.  
 Merritt, R. W.  
 Millard, W. J.  
 Miller, D. G.  
 Miller, S. P.  
 Minard, F. H.  
 Mish, E. H.  
 Moeller, F.  
 Monroe, E. H.  
 Mooney, J. D.  
 Moore, G. P.  
 Moore, H. A.  
 Morfit, C. C.  
 Morrill, A. H.  
 Morrison, A. C.  
 Morrison, H. A.  
 Mosehauer, E.  
 Moses, F. G.  
 Mosman, P. A.  
 Mott, G.  
 Motter, W. D. B., Jr.  
 Moulton, H. G.  
 Mrkvicka, G. A.  
 Mueller, F.  
 Mueser, E. E.  
 Muldaur, G. B.  
 Munroe, H. S.  
 Murrie, J. L.  
 Myers, W. M.  
 Naething, F. S.  
 Nageo, T.  
 Naramore, C.  
 Neale, L. I.  
 Neale, W. G.  
 Nealey, J. B.  
 Negru, J. S.  
 Nelson, C. W.  
 Neukumet, W.  
 Newberry, A. W.  
 Nichols, C. W.  
 Norrie, L. B.  
 Norris, G. L.  
 Notman, A.  
 Notman, G.  
 Oliver, R. B.  
 Oltarsh, D. M.  
 O'Neil, F. W.  
 Orrok, G. A.  
 Osborn, W. H.  
 Osmond, C. H.  
 Ostgren, G. L.  
 Ostrander, F. T.  
 Pack, C.  
 Pagliuchi, F. D.  
 Palmer, E.  
 Palmer, W. R.  
 Parsons, A. B.  
 Paul, R. B.  
 Payne, A. C.  
 Payne, C. Q.  
 Peale, R.  
 Peale, R.  
 Peckitt, L.  
 Peek, R. L., Jr.  
 Peele, R.  
 Pell, V. D.  
 Pelton, E. F.  
 Perin, C. P.  
 Perkins, E.  
 Perkins, J. R.  
 Perry, R. S.  
 Peters, C. B.  
 Pew, J. G.  
 Pierce, F. E.

## New York.—Continued.

Pierce, J. H.  
 Pilger, T.  
 Pogue, J. E.  
 Poillon, H. A.  
 Poirier, C. H.  
 Polushkin, E. P.  
 Porter, H. H.  
 Potter, W. C.  
 Powell, De V.  
 Powell, F. J.  
 Pratt, J. C.  
 Price, E. F.  
 Price, H. B.  
 Priestley, W. J.  
 Primrose, J.  
 Prindle, E. J.  
 Prosser, H. A.  
 Prud'homme, H.  
 Pumphrey, M. E.  
 Queneau, A. L. J.  
 Quigley, W. S.  
 Quigly, W. J.  
 Ramsey, E. R.  
 Rand, L. H.  
 Ranney, L.  
 Ravicz, L.  
 Read, T. T.  
 Reed, C. S.  
 Reno, J. W.  
 Repetti, G. W.  
 Reynders, C.  
 Reynders, J. V. W.  
 Richards, H. A.  
 Rickard, E.  
 Riddell, G. C.  
 Rieber, T.  
 Rinehart, C. R.  
 Roberts, A.  
 Roberts, N. W.  
 Robertson, F. Y.  
 Robie, E. H.  
 Robins, J. H.  
 Robins, T.  
 Robinson, H. O.  
 Roesler, M.  
 Roger, J.  
 Rogers, A. H.  
 Rogers, A. P.  
 Rogers, E. M.  
 Ronaghan, A. J.  
 Roosevelt, R. M.  
 Rose, C. A.  
 Rossin, E. L.  
 Roth, C. F.  
 Roush, G. A.  
 Rowand, L. G.  
 Rowe, C. E.  
 RuKeyser, W. A.  
 Runge, W.  
 Rushmore, D. B.  
 Russell, D. L.  
 Russell, W. F.  
 Rutherford, F.  
 Ryan, F. C.  
 Ryan, J. D.  
 Ryan, R. E.  
 Sadow, S. J.  
 Sage, M. W.  
 St. Clair, S.  
 Sanders, W. M.  
 Sanger, A. B.  
 Saunders, W. L.  
 Savage, H. D.  
 Sealise, V. B.  
 Schafer, E. D.  
 Schail, W. M.  
 Schapiro, M. A.  
 Schieren, C. A.  
 Schilowsky, I.  
 Schneider, A. F.  
 Schneider, W. G.  
 Schroter, G. A.  
 Schultz, H. C.  
 Schwab, C. M.

## New York.—Continued.

Schwerin, C. M.  
 Scott, P. B.  
 Seaman, H. B.  
 Searls, C.  
 Searls, F., Jr.  
 Seidell, L. R.  
 Seligman, A.  
 Seligman, A. J.  
 Shannon, R. W.  
 Sharpless, F. F.  
 Shaw, E. W.  
 Shedden, J. S.  
 Shinkle, V. G.  
 Shipp, E. M.  
 Shiverick, C.  
 Shurick, A. T.  
 Sidley, W. D.  
 Sieger, G. N.  
 Simonds, F. M.  
 Simpson, K. M.  
 Sinclair, J. H.  
 Singmaster, J. A.  
 Singstad, O.  
 Sinn, F. P.  
 Sinsheimer, W. A.  
 Skinner, E. N.  
 Skogmark, J.  
 Skougor, H. E.  
 Smith, C. B.  
 Smith, C. H.  
 Smith, E. A. C.  
 Smith, E. P.  
 Smith, E. W.  
 Smith, H. D.  
 Smith, H. D.  
 Smith, H. E.  
 Smith, H. W.  
 Smith, M. C., Jr.  
 Smith, P. L.  
 Smith, P. L.  
 Smith, V. C.  
 Smith, W. S.  
 Smoot, A. M.  
 Smullen, C. K.  
 Snider, J. B.  
 Snider, L. C.  
 Snow, C. H.  
 Snow, F. W.  
 Sohon, J. A.  
 Soldatov, V. V.  
 Sonneborn, L. H.  
 Soper, E.  
 Soper, R. H.  
 Sorensen, S. S.  
 Souder, H.  
 Sowerwine, E. O.  
 Spencer, F. N.  
 Spencer, N. S.  
 Spicer, H. N.  
 Stack, F. L.  
 Stanley, R. C.  
 Steele, H.  
 Stefanides, V. N.  
 Stehle, C.  
 Stephens, R.  
 Stevens, B. K.  
 Stewart, H. R.  
 Stewart, J. B.  
 Stiefel, F. W.  
 Stiles, T. W.  
 Stille, F. C.  
 Stillman, A. L.  
 Stoiber, L. A.  
 Stone, G. C.  
 Stout, H. H.  
 Straus, R. W.  
 Strauss, L. W.  
 Strobel, L. F.  
 Stuart, C. E.  
 Sturges, C. B.  
 Sturgis, E. B.  
 Suhl, R. L.  
 Sussman, O.  
 Taber, G. H., Jr.  
 Taggart, A. F.

## New York.—Continued.

Tainter, F. S.  
 Tartaron, F. X.  
 Taylor, H. N.  
 Taylor, L. S.  
 Teagle, W. C.  
 Terry, L. F.  
 Thatcher, C. J.  
 Thayer, B. B.  
 Thomas, E.  
 Thomas, K.  
 Thompson, J. F.  
 Thompson, R. M.  
 Thomson, A. T.  
 Thomson, S. C.  
 Thorne, S. B.  
 Thornton, W. D.  
 Thropp, D. S.  
 Thum, E. E.  
 Todd, W. P.  
 Tompkins, E. S.  
 Topping, J. A.  
 Torres, F. L.  
 Tour, S.  
 Tower, G. W., Jr.  
 Tower, G. W., 3rd  
 Towl, F. M.  
 Townsend, R.  
 Trent, W. E.  
 Trewin, C. S.  
 Tunnell, G. T.  
 Tuttle, C. E.  
 Tweedy, A. M.  
 Twitchell, K. S.  
 Updike, D. F.  
 Vail, R. H.  
 van Buren, F. R.  
 Van Ells, H. T.  
 Vanick, J. S.  
 Van Law, C. W.  
 Veatch, A. C.  
 Villaume, F. H.  
 Vogelstein, L.  
 Wade, W. R.  
 Wadhams, A. J.  
 Wadleigh, F. R.  
 Wadleigh, F. R., Jr.  
 Wager, E. J.  
 Walker, A. L.  
 Walker, E.  
 Walker, G. B.  
 Walker, H. Y.  
 Walker, M. S.  
 Walker, R. G.  
 Walter, R. A.  
 Waltman, W. D.  
 Wannenmacher, J. M.  
 Ward, A. T.  
 Warfield, W.  
 Warriner, R. C.  
 Washburne, C. W.  
 Wasson, H. J.  
 Watkins, E. G.  
 Watrous, H. C.  
 Weber, W. C.  
 Webster, H.  
 Webster, P. W.  
 Weed, W. H.  
 Wegemann, C. H.  
 Weir, J. C.  
 Weld, C. M.  
 Welling, C. H.  
 Wells, O. W.  
 Wemple, H. R.  
 Wensley, R. L.  
 Werner, J. H.  
 Westcott, W. P.  
 Westervelt, W. Y.  
 Westlake, E. H.  
 Wheeler, A. E.  
 Wheeler, B. L.  
 Wheelock, C. W.  
 Whiting, L.  
 Whitmore, H. B.  
 Whittekin, W. H.  
 Wilding, J.

## New York.—Continued.

Willard, L.  
 Williams, E. G.  
 Williams, L. A. P.  
 Williams, L. W.  
 Williams, R. B.  
 Williams, W. H.  
 Wilputte, L.  
 Wilson, C. H.  
 Wilson, E. J.  
 Wiltsee, E. A.  
 Wise, A. L.  
 Wise, S. L.  
 Witherell, C. S.  
 Woessner, C.  
 Wolf, H. J.  
 Wolfe, W.  
 Wolff, G. F.  
 Worden, B. L.  
 Work, L. T.  
 Wormser, F. E.  
 Worth, J. G.  
 Wotherspoon, W. L.  
 Wraith, W.  
 Wright, T. A.  
 Wuensch, C. E.  
 Wysor, D. C.  
 Yap, C. P.  
 Yeatman, P.  
 York, H. W.  
 Young, C. L.  
 Zerbey, A. L.  
 Zimmerschied, K. W.  
 Zuschlag, T.  
 Newburgh.—Petzel, C. L.  
 Niagara Falls.—Alden, J. H.  
 Baldwin, R. L.  
 Benner, R. C.  
 Comstock, G. F.  
 Durham, E. B.  
 Harbrecht, W. L.  
 Holzworth, C. R.  
 Lee, H. C.  
 Lidbury, F. A.  
 MacBain, J. T.  
 McCormick, T. F.  
 Plock, A. F.  
 Richardson, C. N.  
 Smith, A.  
 Stearns, C. E.  
 Tone, F. J.  
 Udy, M. J.  
 Westcott, E. W.  
 North Creek.—Hooper, F. C.  
 Mennie, T. S.  
 Vogel, H. H.  
 North Tarrytown.—Ward, W. A.  
 Nyack.—Baldwin, W. S.  
 Oakfield.—Eckrote, K. R.  
 Olean.—Bossler, R. B.  
 Page, W. K.  
 Painted Post.—Lauzon, P.  
 Peekskill.—Zodac, P.  
 Pelham Heights.—Kelleher, C.  
 Prince Bay.—Johnston, F. A.  
 Rochester.—Alling, H. L.  
 Arnold, L. L.  
 Atkinson, H. E.  
 Finucane, T. R.  
 Grunow, W. R.  
 Jackman, H. E.  
 Kneath, W. W.  
 Singewald, Q. D.  
 Rome.—Allen, G. H.  
 Salmon, C. P.  
 Roslyn.—Willets, R. H.  
 Willets, S. T.  
 Williams, A.  
 Rye.—Barron, G. D.  
 Saul, A. G. A.  
 Saranac Lake.—Fisher, G. K.  
 Jenkins, C. H.  
 Scarsdale.—Behr, H. C.  
 Livingston, W. S., Jr.



**Schenectady.**—Beattie, H. J.  
Capp, J. A.  
Connell, H. R.  
Ferguson, C. V.  
Fuller, T. S.  
Hansen, C. A.  
Hoyt, S. L.  
Kelley, F. C.  
Pauly, K. A.  
Ruder, W. E.  
Runkle, K. H.  
Sayre, M. F.  
Whiting, M. A.  
Whitney, W. R.  
Zickrick, L.

**Seneca Falls.**—Pomeroy, W. D.

**Syracuse.**—Berry, G. M.

Hackett, C. P.  
Handy, H. H. S.  
Neill, W. L.  
Patterson, C. T.  
Phalen, W. C.  
Richardson, C. H.  
Smith, J. W.  
Smythe, H. V.

**Troy.**—Blauvelt, W. S.

Dean, W. A.  
Hunter, M. A.  
Jones, A.

Ricketts, P. C.

**Warwick.**—Hitchcock, F. R.  
M. (Miss)

**Watertown.**—Gulick, H. S.

Sillcox, L. K.

**Watervliet.**—Grimshaw, L. C.

Lindemuth, L. B.  
Paulsson, N. A. V.

**White Plains.**—Beam, J. C.

Clark, J. E. S.  
Cohen, M. B.  
Siebert, F. J.

**Whitney Point.**—Cook, J. F.

**Yonkers.**—Browne, K. C.

Moore, G.  
Nalen, J. L.  
Rettie, W. H.  
Schlesinger, E.  
Thompson, W. B.

## NORTH CAROLINA

**Asheville.**—Memminger, C. G.

**Bryson City.**—Downs, F. G.

**Chapel Hill.**—Cobb, C.

Pratt, J. H.  
Prouty, W. F.

**Charlotte.**—Knowlton, J. W.

**East Laporte.**—Look, A.

**Fontana.**—Paquette, R. J.

**Franklin.**—Davenport, J.

**Lincolnton.**—Spotswood, A.

**Oxford.**—Lassiter, R. G.

**Raleigh.**—Davis, H. T.

Stuckey, J. L.

**Spruce Pine.**—Burgess, B. C.

**Winston-Salem.**—Higgins, C.  
H.

## NORTH DAKOTA

**Fargo.**—Anders, F. L.

Evesmith, R. W.

**Grand Forks.**—Harrington, L.

C.

Seymour, M. E.

Sutherland, R. L.

**Wilton.**—Thomas, E. M.

## OHIO

**Adena.**—McCasland, R. W.

**Akron.**—Pitkin, S. H.

Schaefer, E. F.

**Aliance.**—Cromwell, J. C.

**Canton.**—Grossmann, M. A.

Lothrop, M. T.

Smith, E. C.

Wilten, H. M.

Wisner, C. B.

**Chillicothe.**—Sproat, A. D.

**Cincinnati.**—Agnew, J. C.

Avril, A. C.

Bayles, F. P.

Behre, C. H., Jr.

Bolton, J. W.

Bonnyman, J.

Enos, G. M.

Houston, D. F.

Kennedy, H. G.

Lewis, J. M.

Marland, J.

Robinson, L. G.

Schreiner, L. G.

Waite, H. M.

**Cleveland.**—Allen, H. J.

Allen, R. C.

Archer, R. S.

Armstrong, H.

Bayless, R. T.

Bell, H. L.

Benbow, B. L.

Block, H. H.

Bourne, H. K.

Boylston, H. M.

Bremer, E.

Brooks, J. Y.

Burton, J. P.

Chapman, C. T.

Chartkoff, E. P.

Crass, M. F., Jr.

Crowell, B.

Croxton, D. T.

Curtis, F. S.

Custer, G. A.

Dalton, H. G.

Delamater, G. R.

Donaldson, K. H.

Dorticos, P.

Drefahl, L. C.

Dunham, L. E.

Eells, H. P., Jr.

Emery, W., Jr.

Emmons, J. V.

Gillies, D. B.

Girdler, T. M.

Greve, L. W.

Guhlman, C. F.

Hall, G. H.

Hanna, H. M.

Haselton, C. F.

Herron, J. H.

Hickok, C. N.

Hicks, C. M.

Hird, A. N. (Mrs.)

Horwedel, C. R.

Hoyt, E., 2nd

Humphrey, G. M.

Ireland, R. L., Jr.

Ives, L. E.

Jeffries, Z.

Jenkin, A.

Johnson, K. W.

Johnston, V. D.

Jopling, R. F.

Kjellgren, B.

Lake, M. C.

Landers, W. H.

Linn, W. J.

Mather, S.

Mather, W. G.

McKee, A. G.

Milisch, C. F.

Miller, L. B.

Munger, C. H.

Murray, C. B.

Oglebay, C.

Pierce, H. L.

Pulsifer, H. B.

Ramsey, W. M.

**Cleveland.**—Continued.

Reed, A. E.

Reid, S. K.

Richards, F. B.

Riddell, J. M.

Ripner, J. J.

Sawyer, C. B.

Schaus, O. M.

Schwartz, H. A.

Stanton, W. H.

Staral, F. J., Jr.

Stebbins, H. S.

Straitiff, C. H.

Sykes, W. P.

Taylor, J. C.

Tinker, W. L.

Treat, F. H.

Tuft, H. E.

Twomey, L. S.

Van Horn, F. R.

Waechter, I. E.

**Cleveland Heights.**—Cawthra,

H. I.

Van Horn, K. R.

Wetherbee, H. E.

**Collins.**—Peirce, C. W.

**Columbus.**—Bloss, R. R.

Bole, G. A.

Bonnet, F. H.

Campana, J. L.

Campbell, J. W.

Campion, E. W.

Cottingham, K.

Demorest, D. J.

Dierker, A. H.

Gillett, H. W.

Gregg, J. L.

Hatton, F. G.

Haverfield, M. G.

Heimberger, W. W.

Howald, F.

King, R. W.

Lamborn, R. E.

Lee, H. C.

Levin, N. D.

Lord, J. O.

Lovejoy, E.

Marshall, L. H.

McCaughy, W. J.

McNamee, F. A.

Montgomery, W. J.

Mueller, W. A.

Nold, H. E.

O'Connor, J. H.

Parsons, R. W.

Pepperberg, L. J.

Poor, W. B.

Poston, E. M.

Powell, D. A.

Quick, R. C.

Ray, F. A.

Ring, D. T.

Schaaf, D.

Schwenn, C. W.

Sickel, H. B. A.

Stout, W.

Sweetser, R. H.

Taggart, E. B.

Williams, C. E.

Wyer, S. S.

**Coshocton.**—Miller, D. I.

**Dayton.**—Beaver, A. B.

Grenell, L. H.

Hartman, W.

Koehring, R. P.

Schenck, P. D.

Sisco, F. T.

Williams, H. M.

**East Canton.**—Augsburger, C.

**East Cleveland.**—Cross, E. O.

Fostoria.—Merrill, L. K.

Gallipolis.—Roberts, D. G.

Genoa.—Wright, K. M.

Gypsum.—Fopeano, J. E.

- Hubbard.—Abel, A. E.  
 Perry, J. E.  
 Velte, R. C.  
 Ironton.—Gilley, J. G.  
 Jackson.—McKitterick, J. J.  
 Lancaster.—Alten, G. H.  
 Lima.—Galvin, J. E.  
 MacDonell, J. A.  
 Mansfield.—Carpenter, C. H.  
 Fox, W. C.  
 Graham, W. F.  
 Olson, L. W.  
 Wolf, F. L.  
 Marion.—Young, R. A.  
 Massillon.—Alden, J. W.  
 Cape, A. T.  
 Cox, H. M.  
 Griffiths, W. E.  
 Mitchell, W. M.  
 Tateyama, S. K.  
 McConnellsville.—Ross, H. H.  
 Middletown.—Beck, W. J.  
 Eppelsheimer, D., Jr.  
 Fondersmith, C. R.  
 Gaw, H. P.  
 Hook, C. R.  
 Nead, J. H.  
 Norris, F. G.  
 Reinartz, L. F.  
 Stutenroth, C. E., Jr.  
 Wilson, H. D.  
 Nelsonville.—Hostetter, A.  
 New Lexington.—Roy, H. G.  
 New Philadelphia.—Bahmer, S. P.  
 Niles.—Schaefer, F. R.  
 Portsmouth.—Cook, H. E.  
 St. Clairsville.—Davis, J. M.  
 Steubenville.—Baird, D. B.  
 Struthers.—Tatman, J. L.  
 Toledo.—Binney, R. L.  
 Cowan, R. J.  
 Flynn, F. N.  
 Pearson, A., Jr.  
 Rohde, O. C.  
 Warren.—Bowden, J. J.  
 Wellston.—Evans, E. P.  
 Morrow, L. W.  
 Youngstown.—Abson, G. W.  
 Bennett, L. B.  
 Bentley, R.  
 Bitzer, E. C.  
 Bray, T. J.  
 Carpenter, H. B.  
 Deetrick, J. W.  
 Heedy, H. G.  
 Heil, C. E.  
 Jordan, F. A.  
 Lockhart, W. R.  
 McCleary, E. T.  
 McDonald, T.  
 Reilly, W. C.  
 Reinhardt, G. A.  
 Robinson, C. S.  
 Russell, D. A.  
 Small, J. A.  
 Smith, A. W.  
 Steese, R. C.  
 Taylor, W. W.
- OKLAHOMA**  
 Ada.—Breitung, C. A.  
 Ardmore.—Buckstaff, S.  
 Burton, G. E.  
 Fell, H. B.  
 Tomlinson, C. W.  
 Walker, D. E.  
 Bartlesville.—Alexander, A. M.  
 Ambrose, A. W.  
 Beecher, C. E.  
 Brandenthaler, R. R.  
 Chalmers, J.  
 Dahlgren, P. F.
- Bartlesville.—Continued.  
 Devine, J. M.  
 Gill, W. H.  
 Hindes, E. P.  
 Lindsly, B. E.  
 Morris, A. F.  
 Nisbet, J. M.  
 Ogden, L. A.  
 Paul, M. J.  
 Peterson, C. J.  
 Price, H. C.  
 Riggs, R. J.  
 Rison, C. O.  
 Taliaferro, D. B., Jr.  
 Terrell, A. D.  
 Westby, G. H.  
 Blackwell.—Godshalk, E. G.  
 Vickery, L. W.  
 Vickery, W. R.  
 Cardin.—Newton, J.  
 Winther, A. S.  
 Chickasha.—Becker, C. M.  
 Cushing.—Hess, R. M.  
 Duncan.—Parsons, C. P.  
 Earlsboro.—Couch, J. E.  
 McNally, R. T.  
 Moeller, R. E.  
 Enid.—Clifton, R. L.  
 Lilligren, J. M.  
 Haileyville.—McAlpine, E. H.  
 Healdton.—Kingelin, G. G.  
 Henryetta.—Cole, J. T.  
 Heitmann, A. L.  
 Holdenville.—Holmes, S. W.  
 Laverne.—Sappington, C. P.  
 Marland.—Copeland, C. M.  
 Dannenberg, R. M.  
 McAlester.—Fleming, W. W.  
 Payne, R. A.  
 Scheble, M. C.  
 Miami.—Ageton, R. V.  
 Gartung, F. H.  
 Earbaugh, M. D.  
 Heilman, J. C.  
 Moran, E.  
 Neal, C. A.  
 Provine, G.  
 Tout, E. I.  
 Williams, C. F.  
 Muskogee.—Anderson, H. G. S.  
 Bradley, O. U.  
 Soyster, H. B.  
 Norman.—Darney, R. P.  
 Dismukes, J. S.  
 George, H. C.  
 Goodrich, P. K.  
 Gould, C. N.  
 Gray, L. L.  
 Lorenzen, J.  
 Maxwell, R. A.  
 McCutchin, J. A.  
 Muir, J. L.  
 Rookstool, F. L.  
 Smith, E. S., Jr.  
 Spencer, M. F.  
 Stevens, C. R.  
 Turnbull, P. R.  
 Weeks, W. B.  
 Weidman, S.  
 Nowata.—Warner, W. W.  
 Oilton.—Hilpert, R. E.  
 Oklahoma City.—Boyd, W. B.  
 Brauchli, R. W.  
 Buttram, F.  
 Keeler, C. M.  
 Meland, N.  
 Miller, W. L.  
 Newby, J. B.  
 Ohern, D. W.  
 Skirvin, O. W.  
 Umpleby, J. B.  
 Walker, A. J.  
 Ward, H. D.  
 Okmulgee.—Wells, S. W.  
 Williams, G. O.
- Pearson.—Gray, J. A.  
 Picher.—Box, I. L.  
 Clarke, S. S.  
 Coulter, D. M.  
 Crabtree, E. H., Jr.  
 Gaines, A. M.  
 MacKallor, D. C.  
 Potter, G. W.  
 Stroup, R. J.  
 Stroup, R. K.  
 Ponca City.—Abozeid, M.  
 Bennett, E. O.  
 Deegan, C. J.  
 Griswold, E. H.  
 McCoy, A. W.  
 Miller, W.  
 Nicola, O. P., Jr.  
 Norville, G. S.  
 Oliver, E.  
 Parker, B. H.  
 Poteau.—Finley, C. H.  
 St. Louis.—Jordan, J. W.  
 Sapulpa.—Bartlett, E. E.  
 Cain, E. H.  
 Mackay, H.  
 Seminole.—Deaver, M. L.  
 DeGraw, C. J.  
 Hohloff, W. T.  
 Holsapple, L.  
 Kollar, R. E.  
 Nye, G. L.  
 Sidwell, C. V.  
 Thompson, L. S.  
 Thomson, H. B.  
 Shawnee.—Haury, P. S.  
 Panner, E. N.  
 Stigler.—Reed, J. O.  
 Stroud.—Byars, R. W.  
 Tulsa.—Alcorn, I. W.  
 Anderson, C. B.  
 Andreen, H. M.  
 Beck, A. F.  
 Beckstrom, R. C.  
 Bernard, H. B.  
 Bernard, W. E.  
 Bignell, L. G. E.  
 Bond, R. W.  
 Bowen, H. P.  
 Brewer, W. F.  
 Bright, R. T.  
 Brown, R. W.  
 Bryant, H. S.  
 Cappeau, J. P.  
 Carr, R. M.  
 Caudill, S. J.  
 Cheney, C. A.  
 Chevalier, J. A.  
 Clark, F. R.  
 W. H. Collins.  
 Crandall, H.  
 Craver, F. S.  
 Decker, H.  
 Dresser, C. K.  
 Eirich, C. G.  
 Ferguson, J. L.  
 Floyd, F. W.  
 Foster, W. H.  
 Frame, H. A.  
 Gardner, J. H.  
 Garpner, E. U.  
 Garrett, S. G.  
 Gawthrop, R. M.  
 Gilmour, A.  
 Goodrich, H. B.  
 Grimm, G. A.  
 Hamilton, W. R.  
 Harlton, B. H.  
 Harnsberger, T. K.  
 Hayward, J. T.  
 Heggem, A. G.  
 Huey, R. K.  
 Hull, J. P. D.  
 Hutchison, L. L.  
 Josey, R. A.  
 Karl, F. W.

**Tulsa.—Continued.**

Keeler, W. W.  
 Kennedy, L. E.  
 Kinter, G.  
 Kirk, C. T.  
 Knappen, R. S.  
 Kornfeld, S.  
 Lasky, B. H.  
 Leavell, J. H.  
 Levorsen, A. I.  
 Lewis, J. O.  
 Ley, H. A.  
 Longmire, W. R.  
 Lyons, R. T.  
 Maddox, A.  
 Mapes, C. B.  
 Matson, G. C.  
 McFarland, R. S.  
 McWilliams, J. R.  
 Merritt, J. W.  
 Miller, W. D.  
 Millikan, C. V.  
 Moote, T. P.  
 Mylius, L. A.  
 Neumann, L. M.  
 Officer, H. G.  
 Osborn, C.  
 Parmenter, C. O.  
 Peabody, H. W.  
 Peake, A. W.  
 Peterson, F. P.  
 Pew, T. W.  
 Pishel, M. A.  
 Porter, E. S.  
 Power, H. H.  
 Powers, S.  
 Price, S. S.  
 Rae, C. C.  
 Raigorodsky, P. M.  
 Rau, H. L.  
 Reisher, P. H.  
 Rodgers, G. B.  
 Rorschach, H. E.  
 Ruedemann, P.  
 St. Germain, R. J.  
 Sale, C. M.  
 Salnikov, I. S.  
 Sawdon, W. A.  
 Sawyer, R. W.  
 Schell, F. A., Jr.  
 Schlater, K. C.  
 Severy, C. L.  
 Shallenberger, J. F.  
 Shaw, S. F.  
 Sheldon, W. W.  
 Silsbee, J. A.  
 Smith, L. E.  
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 Quier, E. A.  
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 Tyson, G. E.  
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 F., Jr.  
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 Oberly, A. D.  
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 Buch, J. W.  
 Buchanan, R. H.  
 Collins, M. W., Jr.  
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 Deichmiller, H.  
 Dimmick, S. D.  
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 Evans, C., Jr.  
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 Gillette, G. M.  
 Haberthier, J. J.  
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 Hershberger, H.  
 Hicks, J. M.  
 Hughes, K. S.  
 Inglis, W. W.  
 Jones, E. S.  
 Kennedy, T. F.  
 Knight, M. S.  
 Lawrence, W. L.  
 Lutz, W. S.  
 Marshall, J. S.  
 McDowell, S.  
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 Otto, H. H.  
 Parke, N. G.  
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 Polack, S. P.  
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 Weichel, L. F.  
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**Shamokin.—Erdman, E. G.**  
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 Moore, W. H.  
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 Schnerr, L. H.  
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 Chedsey, W. R.  
 Corre, H. A.  
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**State College.—Continued.**

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 Williams, M. B.  
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 H.  
 Crawford, J. T.  
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 Sterling, P.  
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 Todd, E. H.  
 Walle, M. P.  
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**Windber.—Enzian, C.**  
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 Newbaker, E. J.  
 Petrecca, W. H.  
 Pfahler, R. G.  
**Woodlawn.—Willard, J. O.**  
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**Wyoming.—Everhart, J. L.**  
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 Frey, V. M.  
 Glomb, W. H.  
 Hardinge, H.  
 Metz, G. F.  
 Monk, T. A., Jr.  
**Zelienople.—White, H. E.**

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Summerville.—Carnahan, C. T.

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Wayland, R. G.  
Wright, L. B.  
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Halley, A. S.  
Lincoln, F. C.  
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Haasis, D. F.  
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Mahan, E. C.  
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Coy, H. A.  
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Newman, M. H.  
Strachan, C. B.  
Young, H. I.  
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Pond, W. F.  
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Hubbard, W. E.  
Kautz, A. R.  
Rogatz, H.  
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Blum, E. H.  
Brown, R. H.  
Carr, G. W.  
Collingwood, D. M.  
Frost, R. B.  
Gardner, F.  
Germany, E. B.  
Hammill, C. A.  
Hill, H. B.  
Kernan, T. H.  
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Martin, J. N.  
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Meredith, C.  
Moir, J.  
Mower, L. K.  
Nichols, C. R.  
Pew, J. E.  
Reid, W.  
Ritzau, K.  
Robinson, H. M.  
Russ, L. F.  
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Williston, S. H.  
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Wrather, W. E.  
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Edna.—Drushel, S. G.  
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Brown, H. E., Jr.  
Carpenter, M. H.  
Carr, H. L.  
Clendenin, T. P.  
Cole, D.  
Collinson, V. A.  
Cooper, W. H.

## El Paso.—Continued.

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Foester, H. W.  
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Macy, G. D.  
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Bruyere, A.  
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Cordry, C. D.  
Covault, F. W.  
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Denning, C. O.  
Donoghue, D.  
Donohue, Frank P.  
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Griswold, H. L.  
Hartwell, M. T.  
Herald, F. A.  
Jenkins, J. H.  
Kimball, E. B.  
Lederer, E. R.  
Liddle, R. A.  
Perini, V. C., Jr.  
Roberts, L. C., Jr.  
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Thompson, B. E.  
Watson, C. P.  
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Lundy, W. T.  
Gulf.—Schwab, J. W.  
Swem, H. A.  
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Houston.—Arnold, H. H., Jr.  
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Bennett, C. M.  
Biesel, C.  
Bowman, W. F.  
Cashin, D. M.  
Conrad, C. S.  
Corless, G. B.  
Cullinan, J. S.  
Deussen, A.  
De Wolf, F. W.  
Dissinger, E.  
Downing, F. E.  
Eby, J. B.  
Eckel, J. E.  
Ehlen, M. C.  
Fletcher, H. W.  
Hager, L.  
Horner, W. L.  
Hruby, M.  
Hutcheson, J.  
Judson, S. A.  
Levy, A. G.

**Houston.—Continued.**

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 Parks, M. H.  
 Pratt, W. E.  
 Price, W. A.  
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 Ryan, R. F.  
 Saville, W. G.  
 Scholl, L. A., Jr.  
 Scott, W. W.  
 Seashore, P. T.  
 Shaw, J. F.  
 Shutts, W. C.  
 Smith, E. W.  
 Struth, H. J.  
 Stubbe, G.  
 Suman, J. R.  
 Sutton, C. E.  
 Teas, L. P.  
 Sharp, W. J.  
 Thompson, S. A.  
 von Muecke, K.  
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 Warren, H. C.  
 Weaver, F.  
 Weinzierl, J. F.  
 Williams, W. A.  
 Wolf, A. G.  
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**McCamey.**—Gregory, P. P.  
 Vance, H. J.  
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 Lloyd, E. R.  
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 Willis, R.  
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 Treichler, H. E.  
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 Dixon, E. S.  
 Mathy, A. L.  
**Pyote.**—Gantz, G.  
**Ranger.**—Dykema, W. P.  
**Riverside.**—Phillips, D. M.  
**San Angelo.**—Briscoe, G. O.  
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 Edwards, E. C.  
 Jones, E. L., Jr.  
 Keyes, W.  
 Kraus, E.  
 Maverick, P.  
 Roberts, M. E.  
 Yewell, P. R.  
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 Bridge, S. D.  
 Hager, D. S.  
 Hager, D.  
 Hartman, A. E.  
 Hawkins, A. L.  
 Jablonski, E.  
 Locke, D. R.  
 Lucke, P. K.  
 McNutt, V. H.  
 Morgan, G. D.  
 Oldham, A. E.  
 Owen, K. D.  
 Petty, O. S.  
 Porch, E. L., Jr.  
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**Sania Anna.**—Gay, J. L.  
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**Sugarland.**—Cocke, A. L.  
**Sweetwater.**—Setinsky, J. H.  
**Terlingua.**—Brown, J. B.  
 Burkman, J. M. F.  
 Lewis, F. E.  
**Texon.**—Smith, L.  
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**Thurber.**—Greenidge, S. M.  
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**Wink.**—Smith, R. H.

**UTAH**

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 L.  
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 Fitch, H. W.  
 Fitch, W.  
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 Wigton, G. H.  
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**Lehi.**—Jones, E. B.  
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**Ophir.**—Hartmann, H. M.

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 Wheeler, R. A.  
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 D.  
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 Billingsley, P.  
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 Breckon, L. S.  
 Brewster, B. B.  
 Burdick, E. H.  
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 Christensen, A. L.  
 Cowans, F.  
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 Dern, G. H.  
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 Dyer, B. W.  
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 Fene, W. J.  
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 Hamilton, P. D. P.  
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 Raddatz, H. E.  
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 Sadler, J. V.  
 Sampson, S. L.  
 Saxman, C. W.  
 Smith, S. W.  
 Snow, J. M.  
 Soupcoff, S. M.  
 Stee, C. O.  
 Stockett, T. R.  
 Strobel, R. L.  
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 Tobelmann, H. A.  
 Van Evera, D.  
 Van Winkle, C. T.  
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 Wagstaff, R. A.  
 Walker, R. T.  
 Wardlaw, F. A., Jr.  
 Watts, A. C.  
 Webb, H. F.  
 Weir, T.  
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 Young, E. B.  
 Zalinski, E. R.

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 Wright, E.

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 Sweet, B. G.

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 McNeil, S. W.  
**Charlotte Court House.—Watkins, J. H.**  
**Charlottesville.—Grasty, J. S.**  
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**Crimora.—Smith, H. C.**  
**Dante.—Bockus, C. E.**  
 Tyler, W. D.  
**Dublin.—Walker, A. J.**  
**Ellard.—McCormick, D. F.**  
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 Banks, H. P.  
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 Butler, M. C.  
 Corey, C. R.  
 Daly, M. R.  
 Daniels, J.  
 Davis, T.  
 Dempster, A. L.

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 Elmendorf, W. J.  
 Evans, G. W.  
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 Goodspeed, G. E., Jr.  
 Hill, F. A.  
 Hovland, J.  
 Hull, J. D.  
 Jackson, G. T.  
 Jenkins, A. C.  
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 Levensaler, L. A.  
 Lewis, C. M.  
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 Manley, H. L.  
 McAllen, J. L.  
 Meenach, H. W.  
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 Leith, K.  
 Mackay, S.

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Elicano, V.  
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Zeller, G. A.  
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Starr, C. C.  
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Hibbert, E.  
McLachlan, C. G.  
Roscoe, H. L.  
Outremont.—Boyd, D.  
Quebec.—Denis, T. C.  
Dufresne, A. O.  
Fleming, A. A.  
Jones, I. W.  
Rouyn.—Hosking, W. J.  
Lawton, N. O.  
Tuttle, J.  
St. Lambert.—Bourne, A. H.  
Thetford Mines.—  
Jenkins, G. F.  
Lavery, V. M.  
Smith, O. C.  
Wiles, G. M.  
Westmount.—Hamilton, W. J.  
Harvie, R.

SASKATCHEWAN

Yorkton.—Webster, E. B.

YUKON TERRITORY

Dawson.—  
MacMillan, W. A. A.  
Mayo.—Wernecke, L.  
Wernecke.—Smith, H. B.

NEWFOUNDLAND

Badger Brook.—Bray, A. C.  
Buchans.—Engel, A. L.  
Fraser, J. H.  
Williams, J. W.  
St. Johns.—Dougherty, E. Y.  
Hatch, H. B.  
Palmer, C. H.

MEXICO

AGUASCALIENTES

Asientos.—Pyburn, P. F., Jr.

CHIHUAHUA

C. Camargo.—Mackenzie, T. G.  
Chihuahua.—Ackerman, G. F.  
Botsford, C. A.  
Chavez, A. G.  
Coyle, T. R.  
Goddard, J. N.  
Hirtzel M. C.  
Horcasitas, A. S.  
Trevino, J. O.  
Upton, W. J.  
Walker, H. A.  
Cusihiuriachic.—Fink, W. N.  
Estacion Marquez.—Lea, J.  
Guazapares.—Schloesser, A. R.  
La Cienega.—Charles, B. E.  
Parsons, E. W.  
Seamon, W. H., Jr.  
Los Lamentos.—Brooks, J. M., Jr.  
Selfridge, G., Jr.  
Parral.—Blackwood, H.  
Boero, C.  
Gilyard, A. L.  
Horle, A. F.  
Pope, D. J.  
Syner, C. M.  
Wellman, W. H.  
San Francisco del Oro.—Allen, G. L.  
Brown, S. R.  
Dixon, A. M.  
Naudin, L. V.  
Newman, G. H.  
Rangel, R.  
Simpkins, L. D.  
Strout, E. A.  
Santa Barbara.—Johnson, H.  
Lord, P. B.  
Valle de Allende.—Fernandez, A. L.

COAHUILA

Esmeralda.—Eddelman, W. S., Jr.  
Est San Juan.—Thompson, T. W.  
Rosita.—Beckwith, E.  
Saltillo.—Fry, L. D.  
Petsch, A. H.  
Salisbury, E. F.  
Torreon.—Sellers, S. S.  
Yeandle, W. H., Jr.

DURANGO

Bacis.—Griffiths, G. F.  
Chinacates.—Milward, M. S.  
Stephenson, T. L.  
Sullivan, C.  
Guanacevi.—Cobb, H. M.



Ojuela.—Savage, J. P.  
Santiago Papasquiaro.—Hale,  
P. H.  
Tayoltita.—Morel, L. F.  
Wood, F.  
Velardena.—Burgren, A. W.  
Vicente Guerrero.—Hanson, H.  
B.

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Armit, R. L.  
Babb, P. A.  
Barrera, T.  
Bellwald, J. N.  
Brinsmade, R. B.  
Chippendale, A.  
Edelen, A. W.  
Garcia, A.  
Garrido, M. F.  
Gonzalez Acala, J. L.  
Lasso, M. P.  
Main, A. F.  
Moll, C. D.  
Mosonyi, E.  
Nock, W. J.  
Olinger, R. W.  
Palmer, G. C.  
Paredes, T.  
Roel, F.  
Rogers, C. T.  
Rose, H.  
Saunders, T. S.  
Sellerier, C.  
Wolvin, A. B.  
Woodul, J. R.

## GUANAJUATO

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Carrouche, L. F.  
Garza Aldape, J. M.  
Graham, E. E.  
Herr, I.  
Quinn, M. F.  
Sampson, E. H. S.  
Wandke, A.

## GUERRERO

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Campo Morado.—Dobson, P. G.  
McBrien, J.  
Taxco.—Fowler, H. W.  
Temisco.—Bargill, J. D.  
Tequixquiapan.—Cooney, D. C.,  
Jr.

## HIDALGO

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Altshuler, H. I.  
Bryan, R. R.  
Crawford, W. E.  
Donaldson, W. G.  
Douglas, C. B. E.  
Gay, H. S.  
Goldberg, S. B.  
Jenkins, L. R.  
Kuryla, M. H.  
Lantz, C. A.  
Marquand, A. B.  
Ough, S. W.  
Palmer, W. J. A.  
Peterson, J. S.  
Reynolds, L. J.  
Ristedt, E. J.  
Schissler, J. H.  
Wisser, E. H.  
Young, E. L.

## JALISCO

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Ameca.—Hoyle, C.  
McCormick, G. E.  
Cinco Minas.—Middelkamp, L.  
L.  
Etzatlan.—Dolph, O. P.  
Faneuf, S. C.  
Howard, J. H.  
Guadalajara.—Gregory, E. H.  
Strohbach, W. C.  
La Quemada.—Wasley, W. A.  
Magdalena.—Pentland, W. J.  
White, J. L.

## LOWER CALIFORNIA

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Saint-Maurice, H.

## MEXICO

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Tejeda, M. L.

## MICHOCAN

Mineral de Dos Estrellas.—  
Jarvis, R. P.  
Nyberg, H. E.  
Tlalquitenango.—Syme, G. A.

## NUEVO LEON

Monterrey.—Berthier, U. H.  
Fairchild, S. A.  
Ferris, A. L.  
Hall, C. J.  
Hartshorne, E.  
Hayward, M. W.  
Kipp, R.  
Martinez, A. J.  
Martinez, F. C.  
Norcross, F. S., Jr.  
Robinson, G. P.  
Ross, G.  
Sada, P. M.  
Sexton, C. F.  
Soler, V. F.

## PUEBLA

Aire Libre.—Boyd, J. T.  
Hérivel, E. P.  
Hunt, J. E.

## SAN LUIS POTOSI

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Conley, W. A.  
Loerpabel, W. H.  
Schotz, H. H.  
Willey, H.  
Matchuala.—Campbell, K. P.  
Dingwall, W. B. A.  
Reyer, E. E.  
Villafana, M.  
San Luis Potosi.—Hurley, H.  
F.  
Johnson, C. W.  
Luke, R. P.  
McAllister, D. B.  
Partridge, G. W.  
Wadley.—Harper, J. B.

## SINALOA

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D.  
Orynski, R. J.  
Cosala.—Hoag, E. H.

Culiacan.—Cook, E. H.  
Estacion Dimas.—Cushman, C.  
W.  
Donaldson, J. G.  
Goetter, F. B.  
Hintze, A. F.  
Mazatlan.—Guyer, R.  
Patch, D. H.  
Rosario.—Bourhenne, G. H.  
San José de Garcia.—Wynne,  
A. H. P.  
San Vicente.—Everit, R. S.

## SONORA

Arizpe.—Hammond, A. H.  
Cananea.—Catron, W.  
Evans, T.  
Howe, R. E.  
Montague, C. L.  
Montijo, F. H.  
Perry, V. D.  
Strachan, F. J.  
Weed, C. E.  
Wilkinson, A. D.  
El-Molino.—Gieser, H. S.  
Sabin, A. B.  
El Tigre.—Mishler, R. T.  
Nacozari.—Dixon, R. S.  
Englehart, G. W.  
Higley, R. C.  
Horton, H. H.  
Houle, A. J.  
Leland, E.  
Rose, E. H.  
Verity, V. H.  
Pilares de Nacozari.—  
Brussolo, V. A.  
Craig, C. D.  
Davidson, A. P.  
Huff, W. E.  
Pittman, D. B.  
Rinnander, A. J.  
Rowe, C.  
Schrock, M. R.  
Shaw, D. M.  
Thompson, M. V.  
Waugh, K. W.  
San Javier.—Johns, A. L.

## TAMULIPAS

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Bland, R. L.  
Bohart, P. H.  
Chapin, T.  
Chavez, R.  
Cochran, R. B.  
de la Garza Cardenas, J. M.  
Eastman, W. F.  
Eyoub, D.  
Hall, J. H.  
Kaufmann, G. F.  
Milek, A.  
Ordenez, E.  
Ridings, L. J.  
Shaw, J. E.  
Smith, F. D.  
Szily, L.  
Whetsel, R. V.

## VERA CRUZ

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Frey, A. P.  
Mitchell, K. C.

## ZACATECAS

Avalos.—Gonzales Barbosa, L.  
Hill, H. P.  
Manderfield, E. A.  
Concepcion del Oro.—Abbott,  
A. N.

Fresnillo.—Baker, T. C.  
 Binsacca, W. A.  
 Byler, R. E.  
 Cook, S. N.  
 Greenfield, S. J.  
 Hinckley, L.  
 Millikan, C. E.  
 Sperry, A. M.  
 Salaverna.—Evans, H. J.  
 Price, J. F., Jr.  
 Sombrete.—Kelley, A. L.  
 Thielicke, C. G.  
 Zacatecas.—McKay, G. S.

## WEST INDIES

## CUBA

Felton.—Kolwey, H. G.  
 Havana.—Chibas, E. J.  
 Hodgson, J. F.  
 Lane, L. R.  
 Porter, J. C.  
 Matahambre.—Cromwell, R. H.  
 Homer, D. D.  
 Rode, A. H.  
 Pinar del Rio.—Richert, G. L.  
 Rio Cauto.—Vazquez, D. A.  
 Santiago de Cuba.—  
 Aguilera, E.  
 Merryweather, H.  
 Montoulieu, E. I.

## HAITI

Port au Prince.—Lajat, L. A.  
 Wynne, V. A.

## TRINIDAD

Pointe-A-Pierre.—Melvill, F. L.  
 Port of Spain.—Grimes, H. A.  
 San Fernando.—Goodwin, J. A.  
 Owens, A. L.

## CENTRAL AMERICA

## EL SALVADOR

El Salvador.—Kingsbury, C. H.  
 Divisadero.—Leggett, H. B.  
 Swanquist, G. A.

## GUATEMALA

Guatemala.—Mitchell, P.

## HONDURAS

Danli.—Lockwood, B., Jr.  
 San Juancito.—Brühl, P. T.  
 Gisselberg, V. E.  
 Gordon, A. R.  
 Himrod, E. H.  
 Lukis, E. du B.  
 Soule, A. D.

Santa Rosa de Copan.—Keller, A. H.

## NICARAGUA

Managua.—Cardenas, A.

## REPUBLIC OF PANAMA

Panama City.—Henderson, J. McC.  
 Swenson, C. P.  
 Santiago.—Keiller, A. G.

## SOUTH AMERICA

## ARGENTINA

Bahia Blanca.—Elli, E. L. E.  
 Buenos Aires.—Bruner, H.  
 Eveland, A. J.  
 Ezcurra, T. M.  
 Foster, R. S.  
 Lamb, M. R.  
 Lambright, P. W.  
 Shoemaker, M. L.  
 Sol, L.  
 Stebinger, E.  
 Weeks, L. G.  
 White, K. D.  
 Chubut.—Fernandez, C. A.  
 Comodoro Rivadavia.—Schieferdecker, A. A. G.  
 El Sosneado.—Myrin, H. A. W.  
 P'cia de Salta.—Harrington, G. L.  
 San Juan.—Garcia, R.  
 Tres Cruces.—Bergman, R. G. G.  
 Bennett, A. F.

## BOLIVIA

Antequera.—Herreros, H.  
 Atocha.—Jeckell, C. P.  
 Corocoro.—Berton, A.  
 Huanuni.—Bradbury, C. L.  
 La Paz.—Bailey, A. K., Jr.  
 Ball, C. L.  
 Barth, E.  
 Bell, L. R.  
 Ferron, R. D.  
 Glidden, J. T.  
 Graham, E. L.  
 Graham, H. R.  
 Inslee, J. A.  
 Metscher, E. A.  
 Overbeck, R. M.  
 Pomeroy, L. L.  
 Pursel, R. N.  
 Semple, C. C.  
 Llallagua.—Beard, R. R.  
 Cameron, F.  
 Haley, A. J.  
 Holme, P. E.  
 Johnson, H. C.  
 Loomis, N. C.  
 Pickering, J. C.  
 Samoyloff, V. N.  
 Spencer, C. L.  
 Turneure, F. S.  
 Zeigler, G. E.

Oruro.—Marcus, M. A.  
 Pena, A.  
 Rowe, J. H.  
 van Dissel, E. D. Cartier  
 van Dorp, J. F.  
 Venables, H. L.  
 Zyderveld, P. H.  
 Petosi.—Macmillan, K.  
 Soux, H. A.

## BRAZIL

## Federal District

Rio de Janeiro.—Lisboa, M. A. R.  
 Lustosa, J. de A.  
 Trefois, G. H.

## Minas Geraes

Itabira do Matto Dentro.—  
 Sanders, B. H.  
 Lafayette.—Curley, W. P.

## Villa Nova de Lima.—

Chalmers, A. G. N.  
 Clemence, L. M.  
 Davies, E.  
 Downe, A. H.  
 Eddy, R. B.  
 Phillips, L.

## Parana

Tibagy.—Trotzig, P.

## Sao Paulo

Sao Paulo.—Bassett, A. F.  
 de Sousa, C. L. P.  
 Pompeia, J.

## CHILE

Antofagasta.—Callaway, L. A.  
 Cheney, G. M.  
 Orr, T. W.  
 Caletones.—Gordon, D. M.  
 Chanaral.—Allen, J. C.  
 Greninger, I. L.  
 Kuchs, O. M.  
 March, W. S., Jr.  
 Reed, E. F.  
 Roberts, E. N.  
 Chuquicamata.—  
 Carrasco Calvo, J. L.  
 Dunbar, D. M.  
 Erion, R. L.  
 Fish, L. E.  
 Kemp, L. W.  
 Lindenau, E. M.  
 Mason, J. G.  
 Perkins, W. A.  
 Sample, M.  
 Stockdale, S. W.  
 Walker, A.  
 Wheeler, B.  
 Witcomb, R. L.  
 Copiapo.—Henderson, G. M.  
 Coquimbo.—Lorenson, C. A.  
 Magee, J. F.  
 Iquique.—Mather, T. W.  
 Newcomb, C. W.  
 Marie Elena.—Breton, E. J.  
 Ovalle.—Clark, A. L.  
 Potrerillos.—Hoffman, A. A.  
 Koepel, N. F.  
 Osborn, F.  
 Van Buskirk, R. B.  
 Wood, L. C.  
 Zeigler, P. P.  
 Rancagua.—Blessing, E.  
 Evans, A. M.  
 Gifford, R. W.  
 Grant, L. E.  
 Hodges, P. A.  
 Hoover, P. K.  
 Lund, C. N.  
 Martin, J. A.  
 Mazany, M. S.  
 Pearce, M.  
 Rydell, H. G.  
 Shaner, L. W.  
 Stoddard, X. T., Jr.  
 Studstrup, A.  
 Swartz, A. E.  
 Turner, W. J.  
 Van Alstine, C. L.  
 Wichmann, A. P.  
 San Bernardo.—Foster, L. J.  
 Santiago.—Carr, R. P.  
 Craig, E. J.  
 Elguin A., A. N.  
 Hochschild, S.  
 Hundley, O. B.  
 Judson, W. R.  
 Koeberlin, F. R.  
 Leighton, T. R.  
 Munoz, E.

**Santiago.—Continued.**

Schmidt, W. C., Jr.  
 Seibert, P. A.  
 Sundt, F. A.  
**Sewell.—**Griffiths, W.  
 Higgins, L. T.  
 Lewis, A. L.  
 Maurer, R. B.  
 Rain, A. D. M.  
 Torrence, E. J.  
**Tocopilla.—**Beeche, G. A.  
 Chapin, E. J.  
 Colville, J. H.  
 Dayhoff, R. W.  
 Duvall, G. T.  
 Hammer, B. E.  
 Harrison, W. H., Jr.  
 Inch, J. C.  
 Laurell, E. E.  
 Longyear, P. O.  
 Myers, C. F.  
 Peterson, C. B.  
 Sharp, E. H.  
 Williams, W. W.  
**Valparaiso.—**Billyard, J. R. H.  
 H.  
 Bruna, A. S.  
 Loram, G. L. H.  
 Loram, S. H.  
 Peddar, T. C.  
**Vina del Mar.—**Benoist, E. J.

## COLOMBIA

**Amalfi.—**Probst, E. A.  
**Andagoya.—**Bradbury, F. D.  
 Brown, E. I.  
 Lindsay, A. K.  
 Marshall, N. C.  
 Reyes, F. A.  
**Barranca Bermeja.—**Castro, J. M.  
**Barranquilla.—**Cornelissen, J.  
 London, C. J.  
 Parrish, K. C.  
**Bogota.—**Archila M., M. J.  
 Haskeil, S.  
 Jimenez, J. J.  
 Storms, F. H.  
**Cali.—**Mejia M., A.  
 Posso, C.  
**Cartagena.—**Shannon, P. F.  
 Steese, J. G.  
**Cucuta.—**Guerrero, L. F.  
**Medellin.—**Botero Londono, J.  
 Botsford, R. S.  
 Jenks, N. L.  
 Posada, J. de la C.  
 Stanley, W. B.  
**Ocana.—**McCulloch, J. P.  
**Santana.—**Crease, H. H.

## ECUADOR

**Guayaquil.—**Harmon, J. P.  
 McGonigle, F.  
 Pettis, E. S.  
 Phelps, W. B.

## PERU

**Callao.—**Tweedie, J. J.  
**Canete.—**Patron, G. R.  
**Casapalca.—**Farish, C. S. T.  
 Foran, J. F.  
 Hughes, J. A.  
 Kendall, F. W.  
**Cerro de Pasco.—**Baertl, E. A.  
 Diaz, L. F.  
 Donoghue, W. B.  
 Johnson, G. J.  
 MacHardy, A. C.  
 Philpott, R. C.

**Cerro de Pasco.—Continued.**

Portella, C. A.  
 Pride, W. L.  
 Stewart, H. M.  
 White, N. R.  
 Williamson, E.  
**Chimbote.—**Erquiaga, R.  
**Chuquibambilla.—**Billwiller, C. J., Jr.  
**Goyllarisquisga.—**Mesney, R. J.  
**Huanuco.—**Brown, L. T.  
**Iquitos.—**Arana, L. A.  
**La Fundicion.—**Keep, G. A.  
 Soltis, J. P.  
**Lima.—**Aguilar-Revoredo, J. F.  
 Alayza, C.  
 Balta, J.  
 Bosombrio Echenique, L.  
 Belon, E. T.  
 Bentin M., R.  
 Boza, H. J.  
 Bravo, J. J.  
 Fernandini, E. P.  
 Fort, M.  
 Fuchs, F. C.  
 Hickok, K. E.  
 Kingsmill, H.  
 Klepetko, F.  
 Patron, A. R.  
 Remy, J. F.  
 Rosenshine, L. J.  
 Sanchez, R. M.  
 Scarfe, G. O.  
 Smart, O. B.  
 Young, J. S.  
**Miraflores.—**Neal, H. C.  
**Morococha.—**Butler, W. H.  
 Chase, P. W.  
 Dandois, C. F.  
 Dillingham, G. B.  
 Francis, T. N.  
 Johnston, B. A. C.  
 Lovelace, M. B.  
 Stewart, K. M.  
 Whitney, H. M.  
**Negritos.—**Andreev, V. N.  
 Boughton, C. W.  
 Iddings, A.  
 Stauff, J. L.  
**Oroya.—**Bryant, A. D.  
 Colley, B. T.  
 Fowler, W. W.  
 Godat, E. A., Jr.  
 Harper, T. E., Jr.  
 Harvey, R. D.  
 Monson, W. T.  
 Murphy, J. S.  
 Spilsbury, R.  
 Walker, W. F.  
 Wheeler, A. A.  
**Santo Domingo.—**Woods, C. L.  
**Tamboraque.—**  
 de la Puente, J. R.  
**Trujillo.—**Allard, C. N.  
 Carlyle, E. J.  
 Douglass, R. E.  
 Drummond, P. R.  
 Emmel, R.  
 Hewgill, R.  
 Rodriguez, M. O.  
 Schuler, W. N.  
 Stanford, J. V.  
 Tarnawiecki, M. C.

## VENEZUELA

**Aroa.—**Allen, C.  
**Caracas.—**de Uribe-Echebarria, L.  
 Kilinski, E. A.  
 Langdon, A. C.  
 Morales, G. M.  
 Templeton, E. C.  
**Ciudad Bolivar.—**Blanford, A. W.

Brossard, E. E.  
 Love, F. A.  
**Coro.** Hopkins, J.  
**Maracibo.—**Bancroft, H.  
 Bassett, C. F.  
 Billick, D. C.  
 Bleeker, E. S.  
 Boggs, R. L.  
 Burnett, J. B.  
 Clark, J. A.  
 Dana, E. B.  
 Davis, T.  
 Dickerson, R. E.  
 Dickson, T. I.  
 Douglas, J. M.  
 Engleman, R.  
 Evers, H.  
 Forster, W. L.  
 Fraser, W. A.  
 Frigar, E. D.  
 Gates, L. H.  
 Hardy, W. W.  
 Helffrich, O. B.  
 Hendrichs, W. Th. M.  
 Kalb, J. L.  
 Kennard, H. C.  
 Laurie, F. C.  
 Lesniak, S. W.  
 Macintyre, E. G.  
 Murray, G. H.  
 Neal, E. S.  
 Nolan, P. E.  
 Rank, R. A.  
 Rapoport, F. G.  
 Richards, R. W.  
 Ritter, E.  
 Satchell, E. A.  
 Sauve, N. B.  
 Sherman, H.  
 Shirley, H. V.  
 Spice, W. H., Jr.  
 van Aubel, H. E.  
 Vigeon, H. D.  
 Watson, N. O.  
 Wharton, H. J.  
 Wilson, C. S.  
 Winham, H. F.  
**Maturin.—**Hawkins, G. D.  
 Whitman, R. V.  
**Puerto Cabello.—**Newhall, P. M.

## EUROPE

## GREAT BRITAIN

## England

**Bedford.—**Barber, G. M.  
**Birmingham.—**Pannell, E. V.  
 Russell, G. A. V.  
 Smith, D. M.  
 Smout, A. J. G.  
**Blandford.—**Forbes, D. G.  
**Boro Green.—**  
 McDermott, E. D.  
**Brighton.—**  
 Malcolm-Sim, A. C. B.  
**Bristol.—**Brander, J.  
**Bromley.—**Williamson, H. D.  
**Bromsgrove.—**  
 Crankshaw, H. M.  
**Bury St. Edmunds.—**  
 Cooke, H. M. A.  
**Chatteris.—**Curtis, A. L.  
**Chichester.—**Lindsay, L.  
 Cleckheaton.—  
 Wilkinson, W. H.  
**Cornwall.—**Clarke, A. C.  
 Knapp, E. A.  
 Tilly, A.  
 Wellington, W. J.  
**Darwen.—**Holgate, T. E.  
**Doncaster.—**Neelands, A. R.



Durham.—Blackett, W. C.  
 East Grinstead.—Newbold, E.  
 Erith.—Waymark, D. H.  
 Essex.—Marriner, J. T.  
 Haltwhistle.—Bury, E.  
 Hindhead.—Body, J. B.  
 Kenilworth.—McMillan, A. J.  
 Keswick.—Wilson, A.  
 Liverpool.—Fox, A., Jr.  
 London.—Agnew, J. A.

Armstead, D. M.  
 Ashmore, G. P.  
 Baker, C. J. S.  
 Barnett, W. J.  
 Barron, W. A.  
 Beasley, W. H.  
 Bloomfield, E. C.  
 Blow, J. J.  
 Blyth, W. B.  
 Boise, C. W.  
 Brett, A. J.  
 Broadley, J. R.  
 Brown, E. O. F.  
 Brown, R. G.  
 Brugger, M.  
 Bullock, S. C.  
 Burton, C. R. C.  
 Cautley, A. O.  
 Chalmers, J. W. P.  
 Chikanzeff, I.  
 Claudet, F. H. B.  
 Cockerell, L. M.  
 Comins, D.  
 Cosh, A. D.  
 Courtney, C. F.  
 Crookston, A. W.  
 Currie, D.  
 Currie, W.  
 Davis, C. R.  
 Dickerman, N.  
 Dixon, M. M.  
 Edwards, H. R.  
 Emory, L. T.  
 Farrant, J. C.  
 Frecheville, R. J.  
 Frecheville, W.  
 Geppert, R. M.  
 Gilchrist, P. C.  
 Gray, G. W.  
 Gregory, S. H.  
 Gunther, C. G.  
 Hadfield, R. A.  
 Haines, C. V.  
 Harbord, F. W.  
 Harris, H.  
 Hastings, A. T.  
 Heberlein, K. B.  
 Henderson, J. A. L.  
 Higgins, A. H.  
 Horner, P. K.  
 Horwood, C. B.  
 Hunter, C. M.  
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 Klug, G. C.  
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 Mackness, C. F.  
 Manners, E. A.  
 Marriott, H. F.  
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 McKillop, J.  
 Merrett, W. H.

# London.—Continued.

Merricks, F.  
 Mitchell, D. P.  
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 Newberry, R. W.  
 Nicholson, F.  
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 Palmer, R. E.  
 Perkins, W. G.  
 Pollen, C. H.  
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 Primrose, H. S.  
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 Scully, T. T.  
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 Stockwell, R. K.  
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 Thompson, A. B.  
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 Woolmer, H. C. P.  
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 Wright, L. T.  
 Wylder-Hollis, F. J.

# Manchester.—

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 Sheffield.—Holden, S. M.  
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 Spittle, A.  
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 Sutton.—Dixon, J. T.  
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 Warrington.—Gwyer, A. G. C.  
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 Whitchurch.—  
 Wilkinson, W. F.  
 Withington.—Hugon, E. C.

# Scotland

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 Rankin, A. C.  
 Rutherford, W. P.  
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 Newlands.—Bannister, W. J.  
 Portobello.—Balfour, J. F.

# Wales

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 Swansea.—Corfield, R. W. G.  
 Whitchurch.—Thomas, H. S.

# AUSTRIA

Feldbach.—van der Gracht,  
 W. A. J. M. van Water-  
 schoot.

# BELGIUM

Brussels.—Butler, W. V.  
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 Deschacht, J.  
 Grant, R. C.  
 Heymans, W. J.  
 Hill, R. S.  
 McMillan, W. D.  
 Poncelet, E. F. M.  
 Posada, Gaviria, V.  
 Sengier, E.  
 Shaler, M. K.  
 Smith, D.  
 Solvay, A.  
 Van Bree, F.  
 Young, G. S.  
 Chenee.—  
 Saint-Paul de Sincay, G.  
 Hoboken.—Leemans, P. J.  
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 Sottegem.—Van Lierde, J.  
 Tervueren.—Mamet, O.

# FRANCE

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 Montfleury.—  
 Bordeaux, A. F. J.  
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 Cardozo, H. A.  
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 Choffel, F. A.  
 Cruz-Monclova, H. E.  
 de La Bouglise, R.  
 de Wendel, C.  
 de Wendel, M.  
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 Le Chatelier, H.  
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 Martignan, P. G.  
 Meyerovitch, J.  
 Nogues, A.  
 Osborne, W. A.  
 Paix, E. C. M.

**Paris.—Continued.**

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Robellaz, F.  
Rossback, E. J.  
Sauvajol, P.  
Sinn, A. H.  
Stein, C. M.  
Taffanel, J.  
Wethey, A. H.  
Wohrman, C. R. E.  
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**Strasbourg.**—  
Pellissier, A. E. C.  
**Villemagne.**—Macfee, R.  
Purvis, R. A.

**GERMANY**

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Nugel, K.  
Tama, M.  
Wadsted, B.  
Zornig, H. H.  
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Kohlmeyer, E. J.  
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Erb, J. T.  
Fokker, I. A.  
Hoekstra, J. A.  
Houwert, F. J.  
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**The Hague.—Continued.**

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Templeton, R. R.  
van Bosse, P. M.  
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van Lier, R. J.  
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Dumitrescu, V.  
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Ong, J. N.  
**Madrid.**—Davila, M.  
Luchsinger, F.  
Roca, E.  
Sistermans, F.  
**Ovieda.**—  
Fernandez-Ladreda, J. M.  
Jones, C. H.  
**Penarroya.**—LeRumeur, J. G.  
Merlin, R.  
**Rio Tinto.**—Timmis, F. W.  
Wilson, R.

**Sevilla.**—Browning, W. J.  
de Ibarreta y Uhagon, L.  
Megraw, H. A.  
**Torrelavega.**—  
Barcena y Diaz, L.  
Falco, A. R.

**SWEDEN ..**

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**Hellekis.**—Danielsen, N.  
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Hoganas.—Blomquist, E. R.  
**Idkerberget.**—Kempe, J.  
**Iggesund.**—Lund, K. G.  
**Kallholmen.**—Palén, A. G. P.  
**Kallinge.**—Kockum, E.  
Larson, U. O.  
**Kiruna.**—Hook, C. R.  
**Kusfors.**—Mortsell, K. W.  
**Ljusne.**—von Eckermann, H.  
**Nora.**—Kroepelin, H. K. J. J.  
**Oxelosund.**—Ericsson, E. A.  
Hamfeldt, G. K.  
Mortensen, E.  
**Sandviken.**—Goransson, K. F.  
**Soderfors.**—Hultgren, A.  
**Stockholm.**—Bengtson, E.  
Carlberg, H.  
Pettersson, W.  
Schmiterlow, C. E.  
**Soderberg.**—O. A.  
**Sundberg.**—K.  
**Tennberg.**—C. I.  
Tesch, T. A.  
Tiberg, S.  
Wahlberg, A.

**SWITZERLAND**

**Andeer.**—Ragaz, I.  
**Basle.**—Bernoulli, W.  
Hotz, W.  
Kugler, H. G.  
Ritter, E. A.  
Timm, J. M.  
**Bremgarten.**—Gutzwiller, O.  
**Geneva.**—De Stoutz, E.  
Dupare, L.  
Moulin, G. F. A.  
**Lungern.**—Richardson, L. J.  
**Olten.**—Erni, A.  
**Zurich.**—Escher, F.

**TURKEY**

**Constantinople.**—  
Touwaide, R. H.

**U. S. S. R.**

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**Ekaterinburg.**—  
Baraboshkin, N.  
**Kars.**—Atherton, T. W. T.  
**Kharkoff.**—Shapira, S.  
Starr, C. T.  
Werchowsky, E.  
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Maliavkin, S.  
Mushketov, D.  
Skotchinsky, A. A.  
Trushckoff, N.  
**Moscow.**—Goubkine, I. M.  
Goubkin, S. I.  
Kartchevsky, A. A.  
Pasuchin, W. A.  
Pritula, A. F.  
Strigeoff, J. N.  
Trushlevich, V. J.  
**Reval-Esti.**—Zeidler, R. F.  
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Yassukevich, S. M.

ASIA

CHINA

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Anking.—Shao, C. C.  
Anzan.—Umene, T.  
Canton.—Crampton, F. A.  
Tong, S. K.  
Dairen.—Nishihara, I. H.  
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Fushun Colliery.—  
Kunimatsu, M.  
Hankow.—Wang, C. Y.  
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Hong Kong.—Draper, M. D.  
Ho, C. K.  
Ng, S. S. H.  
Yung, M. B.  
Honkoku.—Chou, C. H.  
Huchow.—Hsu, S. C.  
Kiangsu.—Hsu, P. C.  
Kotchin.—Loo, W. W.  
Macao.—Lo, H. Y.  
Moukden.—Wang, C. F.  
Nanking.—Chang, K.  
Pei Piao.—Moller, W. A.  
Peking.—Kenrick, J. P.  
Mills, E. W.  
Sen, J.  
Shanghai.—Chen, Z. C.  
Kang, S. C.  
Wang, Y. T.  
Taiyuan.—Tong, T. S.  
Tung, T. S.  
Tientsin.—Kwang, K. Y.  
Woo, Y. T.

CYPRUS

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Skouriotissa.—Bruce, J. L.  
Douch, W.  
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INDIA

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Burma

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V.

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IRAQ

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JAPAN

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Katsura, B.  
Kawamura, T.  
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Kramer, R. E.  
Kurata, K.  
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Matsubara, S.  
Matsuzawa, D.  
Mitsuda, S.  
Mitsui, T.  
Naoto, H.  
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Otagawa, M.  
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Sagawa, E.  
Sakikawa, M.  
Satoh, S.  
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Sugimoto, I.  
Takenouchi, K.  
Tanaka, J.  
Tokunaga, S.  
Tomita, H.  
Ueno, K.  
Weigall, H. S.  
Yamada, F.  
Yokobori, J.  
Yonekra, K.  
Toyamaken.—Kiyoto, Y.  
Usukigori.—Kasahara, W.  
Yehime-Ken.—Ito, M.

Chosen (Korea)

Hokuchin.—Robbins, H. R.  
Holkol.—Weigall, A. R.  
Keijo.—Fukami, Y.  
Ishikawa, T.  
Kawasaki, S.  
Kenjiho.—Inouye, J.  
Kaneko, K.  
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Kokaido.—Nabeshima, T.  
Seoul.—Yoshizawa, K.  
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Unsankinko.—Van Ess, T. W.

PERSIA

Mohammerah.—Clark, C. R.

SIAM

Takuapa.—Cundy, H.

SIBERIA

Temsk.—Penn, N. S.

MALAYSIA

BORNEO

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MALAY STATES

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Peterson, A. M.

NETHERLANDS  
EAST INDIES

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Blora.—Coutts, W. G. B.  
Karimoen.—van der Hoff, W. A.  
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Serang Djaja (Sumatra).—  
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Penberthy, J. E.  
Poulsen, M.  
Vander Maelen, C.  
Kambove.—Walker, E. H.  
Likasi-Chituru.—Barzin, H.  
Likasi-Panda.—Hawley, R. H.  
Luena.—Leonard, R.  
Panda.—Handley, R. W.  
Rey, M. R. W.  
Verdussen, J. A. C.

## BRITISH EAST AFRICA

'Mbarara.—Chennells, J. A.  
Tabora.—Parsons, E.  
Uganda.—Newport, G. H.

## GOLD COAST COLONY

Accra.—Bensusan, A. J.  
Insuta.—Miller, C. R.  
Oda.—Daniel, J. A.

## EGYPT

Cairo.—El-Difrawi, A. H.  
Fahmy, E-H. E-S.  
Suez.—Henderson, W. H.

## NORTHERN NIGERIA

Jos.—Bate, S. C. C.  
Cousin, R.  
Dick-Cleland, A. F.  
Parker, A. E.  
Sinclair, W. E.  
Sokoto.—Cochran, H. A.

## RHODESIA

Beatrice.—Howard, T. C. L.  
Broken Hill.—Bancroft, J. A.  
Bishop, E. G.  
Guernsey, T. D.  
Jessup, D. W.  
Kingston, C. B.  
Rappold, W. F.  
Watson, W. N.  
Bulawayo.—Griffin, H. M.  
Robson, J. E.  
Eiffel Flats.—Kearney, J. M.  
Rome, A. S.  
Fort Jameson.—Gill, D.  
Gatooma.—Pringle, R. W.  
Kansanshi.—MacLeod Elliott, E.  
Lonely Mine.—Durham, B. W.  
Luanshya.—Irwin, D. D.  
N'dola.—Burns, W.  
Feiss, J. W.  
Jeffreys, R. R. V.  
Matson, H. T.  
Millar, W. B.  
Peterson, R. M.  
Shamva.—Moubray, J. M.  
Sinoia.—Douglas, J.

## TUNISIA

Mégrine.—Martin, T.

## UNION OF SOUTH AFRICA

## Cape Colony

Cape Province.—Ricker, S.  
Namaqualand.—  
O'Okiep.—Cooper, E. N., Jr.  
Wilson, P. D.  
Port Elizabeth.—Berry, J. F.

## Natal

Durban.—Denny, G. A.  
Malvern.—Starkey, T. R.

## Orange Free State

Kimberley.—Williams, A. F.

## Southwest Africa

Grootfontein.—  
Feldtmann, W. R.

## TRANSVAAL

Dersley.—White, H. A.  
Johannesburg.—Andrew, T.  
Bateman, G. L.  
Chapman, J.

Cohen, E. H. A.  
Diamond, I. J. A.  
Dickinson, H. T.  
Evans, S.  
Grier, C. D.  
Hampton, F. H. F.  
King, O.

Letcher, O.  
Mitchell, G. J.  
Reinecke, L.  
Rusterholz, R. W.  
Templeton, J. M.  
Townsend, H. P.  
Wagner, P. A.  
Wartenweiler, F.

Messina.—Emery, A. B.  
Kehew, F. D.

## MADAGASCAR

Maevatanana.—Schwartz, S.  
Tamatave.—Hoppock, H. H.

## AUSTRALIA

## NEW SOUTH WALES

Branxton.—Thomas, R., Jr.  
Broken Hill.—Adam, J.  
Emery, C. J.  
Fairweather, A.  
Henderson, E. T.  
Lindsay, J. A. M.  
Plummer, P. J. A.  
Captain's Flat.—Thomas, F. L.  
Cheyenne.—Blomfield, A. L.  
Mosman.—Smith, G.  
New Castle.—Bradford, L.  
Port Kembla.—Goode, E. N.  
Rickleman, F. H.  
White, E. A.  
Pt. Waratah.—Martin, S. E.  
Sydney.—Andrews, E. C.  
Blakemore, G. H.  
Blanchard, R.  
Boydell, W. G. B.  
Broué, A. E.  
Hampton, L. C.  
Hancock, H. L.  
Jackson, F. H.  
Kneeshaw, F. P.  
Owen, T. M.  
Power, F. D.  
Robertson, J. R. M.  
Waterhouse, L. V.  
Weston.—McKenney, S.  
Yerranderie.—Mixer, A. F.

## NORTH AUSTRALIA

Darwin.—Horsburgh, J.

## QUEENSLAND

Duchess.—Corbould, W. H.  
Mt. Isa.—Jacobsen, L. K.  
Mount Morgan.—Boyd, A. A.

## SOUTH AUSTRALIA

Adelaide.—Gartrell, H. W.  
Pearson, J. L.  
East Bungle.—  
Hawker, E. W.  
Walleroo.—Brown, A. L.  
Slee, W. E.

## VICTORIA

Armada.—Avery, J.

Beechworth.—Aplin, W.  
Geelong.—Pillow, A. E.  
Kynuna.—Richard, G. A.  
Melbourne.—Avery, D.

Brown, A. T.  
Campbell, A. G.  
Delprat, G. D.  
Fraser, C.  
Hack, C. A.  
Hey, H.  
Hooker, B.  
Horwood, E. J.  
Lewis, E.  
Lyne, H. S.  
McKeown, M. R.  
Parry, C. W.  
Rigg, G.  
Schlapp, H. H.  
Somerset, H. S.  
Wainwright, W. E.  
Weir, G.  
Wilson, H.

Richmond.—Coutts, J.  
Yallourn.—Bridge, J. M.

#### WESTERN AUSTRALIA

Boulder.—Sutherland, J. W.  
Cottesloe.—Hamilton, R.  
Fimiston.—Vail, H. E.  
Kalgoorlie.—Moore, B. H.  
Roberts, G. M.  
Thorn, J. F.  
Muralgarra Station.—  
Wittenoom, C. H.  
Perth.—Montgomery, A.  
Shallcross, V. F.  
Sleeman, H. R.  
Wiluna.—Harris, A. W.  
Prior, C. E.

#### NEW CALEDONIA

Noumea.—Ward, H. R.

#### NEW ZEALAND

Auckland.—Goodwin, R. H.  
Rhodes, C.  
Christchurch.—Reece, E. T.  
Collingwood.—Heskett, J. A.  
New Plymouth.—  
Portland.—Rhodes, F. N.

#### TASMANIA

Derby.—Clark, L. C.  
Hobart.—Kennedy, J.  
Meredith, D. O.  
Launceston.—Dixon, P. S.  
Mackay, A. D.  
Millen, J. D.  
Queenstown.—Hart, W.  
Murray, R. M.

#### Instructed to Hold All Mail

Bennie, J. W.  
Frink, E. P.  
Furbank, A. W.  
Goncalves, J. S.  
Griffith, W. V., Jr.  
Hazen, J. S.  
Hennen, E. H.  
Ilsley, R.  
Kett, F. F.  
MacDonald, H. J. C.  
Mooney, L.  
Parkinson, L. J.  
Sheeler, J. H.  
Shick, H.  
Siebenthal, C. E.  
Woods, C.

Address not Known  
Armstrong, C. T.

Bartlett, S. S.  
Berg, H. A.  
Bradford, S. K.  
Bullock, J. D.  
Cadogan, J. L.  
Clayberg, G. A.  
Closuit, E. M.  
Cohen, E. W.  
Dav, R. B.  
De Balle, P.  
Drew, C. G.  
Feltner, J.  
Godwin, W.  
Hahn, E.  
Hamer, P. O.  
Hartley, J. C.  
Havlin, T. N.  
Heide, H. E.  
Herreshoff, J. B. F.  
Hoard, H. J.  
Hodge, A. C.  
Holloway, W. S.  
Hurlburt, C. M.  
Jones, D. C.  
Klock, P. I.  
Lehnertz, C. A.  
MacIsaac, D.  
MacPhee, N. C.  
May, J. J.  
Middleton, B. L.  
Mizen, B. A.  
Parish, L. H.  
Patterson, A. H.  
Radosavlyevitch, B. M.  
Rogers, R. L.  
Rowland, W. B.  
Seidel, J. J.  
Smith, R. R.  
Van Asmus, E. C.  
Whitmore, N.  
Williams, S. H.  
Willrich, E. G.